The Economist

Chirac plays de Gaulle
PAGE 45

Trade talks off the rails
PAGES 13 AND 69

Congo's forgotten carnage
PAGES 13 AND 41

BIOTECHNOLOGY
A SURVEY, AFTER PAGE 50

MARCH 29TH–APRIL 4TH 2003 www.economist.com

The fog of war

US$4.95 – C$6.95

PRINT EDITION

Full contents
Enlarge current cover
Past issues/regional covers
Subscribe

GLOBAL AGENDA

POLITICS THIS WEEK

BUSINESS THIS WEEK

OPINION
Leaders
Letters

WORLD
United States
The Americas
Asia
Middle East & Africa
Europe
Britain
Country Briefings
Cities Guide

SURVEYS

BUSINESS
Management Reading
Business Education
Executive Dialogue

FINANCE & ECONOMICS
Economics Focus
Economics A-Z

SCIENCE & TECHNOLOGY
Technology Quarterly

PEOPLE
Obituary

BOOKS & ARTS
Style Guide

MARKETS & DATA
Weekly Indicators
Currencies
Big Mac Index

DIVERSIONS

RESEARCH TOOLS

CLASSIFIEDS

DELIVERY OPTIONS
E-mail Newsletters
Mobile Edition
RSS Feeds

ONLINE FEATURES
Cities Guide Go
Country Briefings Go
Audio interviews Go
Classifieds Go

The Economist Group
Economist Intelligence Unit
Economist Conferences
The World In
Intelligent Life
CFO
Roll Call
European Voice
EuroFinance Conferences
Economist Diaries and Business Gifts

Advertisement

Print Edition March 29th 2003

In the fog of war
The regime has not collapsed at once. Apart from that, the war against Iraq is going well ... More on this week's lead article

Previous print editions
Mar 22nd 2003
Mar 15th 2003
Mar 8th 2003
Mar 1st 2003
Feb 22nd 2003

More print editions and covers »

Subscribe
Subscribe to the print edition
Or buy a Web subscription for full access online
RSS feeds
Receive this page by RSS feed

The world this week

Politics this week
Business this week

Leaders

In the fog of war

Kurds, in Iraq and elsewhere
They deserve a break

Congo's war
Turning machetes back into farm tools

World trade
Deadlocked in Doha

Biotechnology
Saving the world in comfort

Letters

On Iraq, anti-Americanism, charity and terrorism, derivatives, altruism, swathes and slews

Special Report

War in Iraq
Off with his head

The scene in Baghdad
Good days for pigeon-sellers

The Kurds in northern Iraq
Waiting quietly, on best behaviour

America and Turkey
A friendship on hold

Diplomacy, continued
The reckoning

Al-Jazeera
Coming of age

Arab protest
Damning and damned

Jordan and Iraq
Volunteers for the war

United States

American public opinion
Still all signed up

The televisual war
A step forward

Arab-Americans
Under suspicion

Sodomy laws and the Supreme Court
The end is nigh

Boston's new bridge
Can't call it that

Lexington
The not-so-quiet American

The Americas

Mexico's political system
Redrawing the federal map

Crime in Brazil
Gangs v the state

Politics in Canada
All about Eves

Asia

Japan
Read all about us

South Korea and America
Patching up

A survey of biotechnology

Climbing the helical staircase

Cluster analysis

A voyage of discovery

Platform tickets

Planting a seed

Pharming today

Reinventing yesterday

The bugs of war

Man and superman

Offer to readers

Sources

Business

Defence contractors
Military-industrial complexities

Textiles
Clever stuff

Television news
Embedded in Iraq

Internet access
Hotspots and fries

European carmakers
Heading east

Express-delivery firms
A package with strings attached

Face value
The communist entrepreneur

Special Report

World trade
The Doha squabble

Finance & Economics

Bank regulation
Basel brush

Markets and war
Gun-shy

Italian finance
Generali finale?

Japan's post office
Leviathan unbound

India's finances
Small savings, big headache

Economics focus
A capital idea

Science & Technology

The environment
The spoils of war

A perfect fossil

Human reproduction
Sex in season

Number theory

Drugs in Central Asia
Deadly traffic

Kashmir
A bloody reminder

Education in China
A private matter

Bangladesh's poisoned water
The tainted source

Middle East & Africa

Congo's wars
Peace, they say, but the killing goes on

Hutu fighters in Congo
The war of the airwaves

Israel's security barricade
Walling them in

A dam in Mozambique
Untapped power

Europe

Jacques Chirac
Can Gaullism work today?

Spain and its regions
Asking for more

Italy's government
Of milk and war

Chechnya's referendum
The vote of the dead souls

Expanding the European Union
Two down, eight to go

Charlemagne
Drowning in a sea of structural funds?

Britain

Reactions
Britain comes round to war

Armed forces
Soldier white

War costs
An affordable war

Chinese students
Western promise

Anglo-Scots Union
Who won?

Regulation
Irregular

ICI
Marconi, mark 2?

Canary Wharf
Nailed to its perch

Bagehot
The home front

Articles flagged with this icon are printed only in the British edition of *The Economist*

Primed to go

Correction

Books & Arts

Sandy Weill
King of the high C

Crossword puzzles
One who rebelled

Volcanoes
One way to dig a hole

Israeli dissent
Patriots too

New fiction
The burdens of the sons

Biography
Friends and influence

Parmigianino
A mannerist master

Obituary

Daniel Patrick Moynihan

Economic and Financial Indicators

Overview

Output, demand and jobs

Prices and wages

Consumer prices

Money and interest rates

The Economist commodity price index

Stockmarkets

Trade, exchange rates and budgets

Office occupancy costs

Emerging-Market Indicators

Overview

Tuberculosis

Economy

Financial markets

Advertisement

Classifieds

Jobs
Governance Fellow on Security and Development (Ref 159)
This is an exciting opportunity to join one of the world's ....

Business / Consumer
WSI Internet - Start Your Own Business
Business Opportunity - WSI Internet Start Your Own Busines....

Tenders
Requests Expressions of Interest for The Development of a New Lignite Mining Facility and Associated New Electric Generating and Transmission

Jobs
Marketing Associate Needed
Marketing Associate Provide analytic support to the Global Product Strategy Group Respo....

Tenders
Republic of Ghana Ministry of Trade, Industry, PSD & PSI - Request for Expression of Interest: Preparation of Competition Bill for Ghana

Jobs
Regional Director Balkans
Job Profile Our Regional Director Balkans (based in Tirana), leads and mobil....

Sponsors' feature About sponsorship »

Copyright © The Economist Newspaper Limited 2006. All rights reserved. Advertising Info | Legal disclaimer | Accessibility | Privacy policy | Terms & Conditions | Help

Produced by = ECO PDF TEAM =
Thanks xxmama

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Politics this week

Mar 27th 2003
From The Economist print edition

One week on

Reuters

Thousands of troops of the **American-led coalition** swept into Iraq from Kuwait while missiles and bombs aimed at military and government targets rained down on Baghdad and other strategically important cities in an attempt to “shock and awe” the Iraqi regime. America claimed precision targeting; Iraq claimed civilian losses.

See article: The progress of the war

Rapid advances through the desert brought American tanks to within around 50 miles of Baghdad to confront the bulk of Saddam Hussein's elite **Republican Guard**, dug in around the capital. Meanwhile, other coalition forces encountered sporadic “pockets of resistance” from regular army and militia forces in towns along the route of advance. Coalition forces suffered few casualties; many Iraqi combatants surrendered or abandoned the fight. American and British dead number around 50.

See article: Bringing in reinforcements

Umm Qasr, Iraq's main port and a vital conduit for humanitarian aid, was secured after several days of guerrilla **attacks by Iraqi forces**. British troops surrounded Basra, Iraq's second city but a hoped-for uprising by the local Shia Muslim population failed to materialise. Other coalition forces captured airfields in western Iraq and were airlifted into Iraqi Kurdistan, north of Baghdad.

Reports that **Saddam** had been killed in early air raids seemed false, but doubts were raised about the authenticity of television appearances of characteristic defiance. America protested as Iraq paraded and interviewed prisoners-of-war on television.

Donald Rumsfeld, America's secretary of defence, cautioned Americans that the war was **nearer its beginning than its end**. Meanwhile, President George Bush met Tony Blair, Britain's prime minister, to discuss rebuilding post-war Iraq. Mr Blair urged a big role for the UN.

See article: In the fog of war

The costs of war

The Senate voted to halve George Bush's proposed $726 billion **tax cut**, which the House had earlier passed in full. The two chambers will now haggle over the differences. Several moderate Republican senators sided with Democrats worried about the worsening fiscal outlook: Mr Bush has sent Congress a bill requesting an initial $75 billion to pay for the war in Iraq.

See article: Taxing times

The Supreme Court heard arguments in an important discrimination case. If it overturns a Texan law banning **gay sex**, it could open the way to gay adoption and gay marriage.

See article: The Supreme Court considers sodomy laws

Daniel Patrick Moynihan, a former Democratic senator for New York, who served four successive

administrations, died.

See article: Daniel Patrick Moynihan

Oil-fired protest

The **Nigerian army** attempted to quell ethnic fighting in the oil-rich Niger delta. Oil firms evacuated their staff and cut Nigeria's output by nearly 40%. An uneasy truce failed to tempt oil companies to return.

In the **Central African Republic**, François Bozizé, the coup leaderand self-proclaimed president, appointed a prime minister who promised to form a clean government for the country.

Europe's “hard core”?

Belgium suggested the creation of a “hard core” of European Union countries, starting with itself, France and Germany, to form a defence club distinct from NATO. The Belgian implication was that Britain is too close to America and would not be part of the new group. The idea is due for discussion on April 29th.

See article: Diplomacy struggles on

Fraud charges were filed in Belgium against **Edith Cresson**, a French member of the European Commission in the late 1990s.

Serb police arrested the deputy commander of a special police unit, Zvezdan Jovanovic, and charged him with murdering **Zoran Djindjic**, Serbia's prime minister, on March 12th. Police claimed he was an extreme nationalist with connections to the criminal underworld.

AP

In the Spanish region of **Catalonia**, the ruling Catalan-nationalist coalition, Convergence and Union, put forward plans to revise the region's constitution, giving it far more self-government.

See article: Spain's unruly regions

In a referendum nearly 90% of **Slovenes** voted for their country to join the EU, while 66% said yes to joining NATO.

See article: Expanding the European Union

In **Chechnya**, nearly 90% of voters turned out for a referendum on a new constitution, and over 95% of these backed it. So official sources said.

See article: Chechnya's flawed referendum

Boris Berezovsky, a Russian super-tycoon, was arrested and then freed on bail in London. The Russian authorities asked for his extradition, accusing him of a fraud involving the Logovaz car company to the tune of $1.9 billion.

Opinion polls showed **Germany's** chancellor, Gerhard Schröder, nine points ahead of the Christian Democrats' leader, Angela Merkel. Last November, not two months after he won re-election, he was ten behind. Why the change? Iraq, mostly.

The North's cold shoulder

North Korea cut one of its few contacts with the United States when it withdrew from regular talks with American officers at Panmunjom, on the border with South Korea. The North increased its military spending “to put all the people under arms and turn the whole country into a fortress”, according to its finance minister. Japan prepared to fire two satellites into orbit to keep a watch on North Korea.

See article: South Korea and America

India and **Pakistan** both test-fired surface-to-surface missiles capable of delivering nuclear weapons. The tests followed the killing of 24 Hindus by Islamic militants in Indian-administered Kashmir.

See article: Attacks in Kashmir

Guerrillas of the Moro Islamic Liberation Front, which seeks a separate Islamic state in the southern **Philippines**, attacked a predominantly Christian village and killed five civilians. Five rebels were shot dead by the villagers.

The number of deaths from SARS, a type of pneumonia that has spread from **China**, rose to more than 50 worldwide. Singapore closed its schools until April 6th after its first death from the disease.

See article: Dread disease

Down in the jungle

A plane carrying three Americans crashed in jungle in **Colombia**. They had been searching for three other Americans taken hostage by FARC guerrillas six weeks ago after their plane had crashed while surveying drug crops.

A second judge was murdered in ten days in **Brazil**, apparently by a criminal gang.

See article: Crime in Brazil

In **Cuba**, a crackdown on opponents of President Fidel Castro's communist regime continued. Some 80 dissidents have been arrested. They stand accused of conspiring with the top American diplomat on the island.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Business this week

Mar 27th 2003
From The Economist print edition

Up and down

Americans proved to be less than optimistic; consumer confidence fell to a near ten-year low in March. Tumbling oil prices and buoyant stockmarkets, which ushered in the start of a **war in Iraq**, proved temporary. As the prospect of a long war loomed, oil prices rose and markets fell.

See article: A good war for shares?

America's **troubled airlines** are suffering. Passenger numbers have fallen by 10% since the start of the war, compared with a year ago, and bookings have declined alarmingly. British Airways also announced that it was axing flights and speeding up job cuts because of the conflict in Iraq.

See article: Flying the unfriendly skies

The World Trade Organisation issued a preliminary ruling against America's **steel tariffs**, which were imposed last year. America said it would appeal against the decision.

See article: Troubled world trade talks

Package deals

Deutsche Post bolstered its ambition to compete with the world's leading delivery companies with the acquisition of Airborne, America's third-largest freight company, for $1.1 billion. Airborne will operate under the German postal giant's DHL Worldwide Express brand. Investors feared that the deal would not deliver, and that regulators might still block it in any case.

See article: Express-delivery firms

Meanwhile, **United Parcel Service** (UPS), the world's leading parcel-delivery service, dropped the string-tied parcel from its shield logo, to reflect the company's broadening role in delivering supply-chain services.

France Telecom ignored flagging stockmarkets and went ahead with a record-breaking *euro*15 billion ($16 billion) rights issue. The French telecoms firm, 56% state-owned, recently announced a loss of over *euro*20 billion. It is languishing under a huge mountain of debt incurred buying overpriced assets in the telecoms boom.

Light entertainment

An American court ruled that **Altria**, the parent company of Philip Morris tobacco, must pay $7.1 billion in compensation and $3 billion in punitive damages to puffers. A class-action suit brought by 1.1m smokers accused the tobacco giant of deceiving consumers into thinking that “light” cigarettes were less harmful than regular ones. An appeal was promised; more lawsuits are certain.

Shares in **Imperial Chemical Industries** (ICI) plunged to a 22-year low after the British paint and

chemicals firm gave warning that its profits in the first quarter would be down by some 25%. More job losses will follow.

See article: More trouble for ICI

HidroCantabrico, a big Spanish utility, acquired a controlling stake in **Naturcorp**, a smaller Spanish gas distributor, through a bid valuing the company at *euro*537m ($573m).

Cable & Wireless got its hands on £1.5 billion ($2.4 billion) in cash that it had set aside to cover possible tax liabilities from its sale of a stake in One2One, a mobile-phone operator, to Deutsche Telekom in 1999. The British telecoms company agreed to pay the Inland Revenue £380m to cover outstanding liabilities for ten years from 1991.

Golden man

John Thornton, often tipped to succeed Hank Paulson as head of **Goldman Sachs**, surprised his rivals with the announcement that he would step down from the investment bank in July. He will take up an academic post at a top Chinese university. Goldman also sacked Todd Christie, chief executive of its specialist share-trading subsidiary, Spear Leeds.

Sandy Weill, chief executive of Citigroup, declined the opportunity to represent small investors on the board of the **New York Stock Exchange**. He withdrew after the proposed appointment was attacked by Eliot Spitzer, New York state's attorney-general. Mr Spitzer had led an investigation that resulted in Citigroup's investment-banking arm, Salomon Smith Barney, paying $400m to settle charges that it had misled investors with overly upbeat equity research.

See article: Sandy Weill

Munich Re reported a profit of *euro*1.1 billion ($1.0 billion) for 2002, less than analysts had expected. The world's biggest reinsurer also said it expected to have to make large write-downs of the value of its shareholdings in the first quarter of 2003.

Fiat sold its Toro Assicurazioni insurance arm to De Agostini, an Italian publishing company, for *euro*2.4 billion ($2.5 billion). The money is earmarked to repay debt in an effort to revitalise Fiat's unprofitable car arm. Fiat Avio, the firm's aerospace division, may go next.

An investigation by federal energy regulators found widespread **manipulation of natural gas and electricity prices** and supplies in California by Enron and five other energy companies in 2001. The findings entitle the state to a refund of over $3.3 billion.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

In the fog of war

Mar 27th 2003
From The Economist print edition

The regime has not collapsed at once. Apart from that, the war against Iraq is going well

Corbis

Get article background

SO WHO is winning? Much of the action in this war is invisible to outsiders. On television the world has been able to witness the bombing of Baghdad and watch the reports filed by the groups of journalists who have been permitted to travel with a handful of advancing American and British units. But most of the serious action—large armoured sweeps through the desert, and the pounding from the air of the armoured divisions of Saddam Hussein's Republican Guard ranged around Baghdad—has taken place beyond the gaze of the cameras. All that can be said by assembling the evidence so far is that the war is following the expected pattern. America's overwhelming military power is bringing it rapid gains on the battlefield. But the United States is deploying its soft power less successfully. The political divisions that prevented the Security Council from giving the war its blessing before it began are not lessening now that it is under way.

What has gone right

Where is the evidence of military success? The “decapitation” strike with which the war opened failed to kill Saddam Hussein or his senior lieutenants. By March 27th, however, seven days after the fighting began, the invasion forces had captured Iraq's southernmost port of Umm Qasr, secured Iraq's booby-trapped oilfields, invested Basra, the country's second city, and moved a powerful tank army to within 50 miles of Baghdad, the seat of the regime. The Americans have captured the main airbases in Iraq's western desert, from where the Iraqi dictator fired missiles at Israel in the last Gulf war, making it harder though not yet impossible for him to do so again. Not one Iraqi aircraft has taken to the sky. No big terrorist attack has taken place in America or Europe. Although Turkey has refused to let America open a second land front against Iraq from its territory, sizeable American special forces have nonetheless been airlifted into Iraqi Kurdistan, north of Baghdad. The coalition's casualties during this opening week have amounted to fewer than 50 dead or missing. On Wednesday, stray American bombs or missiles may have killed nearly a score of civilians in Baghdad. But for the most part, Iraq's civilian casualties in the war have been mercifully low.

This satisfactory start has been obscured by much over-excitable armchair generalship from afar. Wild pessimists in Washington and London, and wild optimists in Paris, Moscow and Arab countries desperate to see the superpower stumble, have portrayed the ability of Mr Hussein's army to knock out a handful of armoured vehicles and helicopters as the Americans drove 200 miles into the centre of Iraq as evidence of the whole invasion plan going awry in the face of “staunch resistance”. Reporters travelling with the fighting units have filed thrilling accounts of “fierce battles”—fierce battles in which, on closer inspection, half a dozen coalition soldiers, or often none at all, turn out to have been wounded or killed. American commanders dismiss speculation that they are failing to meet their timetable. But even if the campaign really has gone slower than planned, the delay probably owed more to rain and sandstorms than to the small raids Iraqi fighters have mounted against the American rear.

So everything is going to plan in the best of all possible plans? Not quite. Against the military success has to be put what might be called a sociological disappointment. In the best of all possible plans, Iraqi soldiers would not have fought at all. Before the start of the war, it was not unreasonable to hope that the regime was loathed so much that the whole rotting edifice would shatter at the first heavy blow. Well, it has not happened. The first week has shown that plenty of Iraqi soldiers are willing for now to put up some sort of fight. It is also a pity that after a week the oppressed Shia people of Basra had given hints

but no definite sign of wanting to rise up again against the regime, as they did in 1991. Many of the war's opponents claim vindication. Instead of welcoming “liberation”, are not the people of Iraq uniting behind their dictator to resist the foreign invader, just as the Russians did under Stalin?

It is possible. People can loathe a regime but loathe an invader more. Yet there are few signs that most Iraqis feel this way. A simpler explanation for the non-rising of Basra could be that its people dare not show their feelings until American or British forces enter the city and prove that they are safe from the regime's reprisals. As for the resistance elsewhere, it was always foreseen that scores of thousands of Saddam loyalists might be driven by fear of revenge at the hands of their own countrymen to fight for the survival of the regime. The surprise, perhaps, is that they are doing the fighting on the battlefield, and not simply waiting in the cities. Iraqis who are not implicated in the crimes of the regime—those in uniform as well as civilians—may yet choose to turn on Saddam, or at least to stand aside and welcome the regime's collapse as the war progresses. Depending on the Americans' plan, this collapse might happen as the result of a particular military shock, such as the crushing of the Republican Guard divisions. Or it might come as the result of asphyxiation, once the Americans isolate the capital from the rest of the country.

How it could end

Even now, in other words, a collapse from within cannot be ruled out. But no responsible military plan can afford to take for granted the idea that the enemy will simply abandon the fight. And if the Iraqis do choose to fight on, a more violent phase of the conflict surely lies ahead. In the first week, American armour bypassed the southern towns in order to thrust towards Baghdad. If the capital does not surrender, the Americans will at some point simply have to battle their way in. This will be perilous. Though outgunned, the Republican Guard divisions arrayed around Baghdad are said to be well dug in. These units are the props of the regime. If they face defeat, Mr Hussein may choose not to capitulate but to deploy the poison gas he used to devastating effect against Iranian troops during the eight-year Iran-Iraq war. And once the Americans do enter Baghdad itself, heavy streetfighting has the potential to take a grisly toll of soldiers and civilians alike.

All in all, it is a grim prospect, but no reason to panic or change course. This newspaper argued in February that it should be no part of anyone's argument for it that this war would be a pushover. So far, there has been no pushover. But by any normal standard the first week has gone well.

The diplomacy is a different matter. The alliances rent by the pre-war diplomacy have not been knitted back together. Relations between America and Russia dipped to a new low after Mr Bush complained to Vladimir Putin about Russia's sale of banned military technology to Iraq. America and Turkey, strategic partners for half a century, have had their worst falling out in memory. Arab reaction is universally hostile: all but one member of the Arab League passed a resolution calling the war a violation of the UN charter and a threat to world peace. France is continuing to block American and British moves at the UN. Germany's foreign minister has given a preposterous warning to his parliament to expect “a series” of similar American-launched wars. When Saddam Hussein is gone, there will have to be what Tony Blair calls “a reckoning”. But first America and Britain must win this war.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Kurds, in Iraq and elsewhere

They deserve a break

Mar 27th 2003
From The Economist print edition

The Iraqi Kurds have had to trim their demands but they should still get as much as possible

EPA

TURKEY'S refusal to give America the full support it requested is bound to increase the importance of the Kurdish guerrilla forces in the war for northern Iraq. It may also raise the stakes in the minds of Iraqi Kurdish politicians. What reward will they expect at the end of the war, and to what extent can these expectations be fulfilled?

The self-rule that the 4m Kurds in northern Iraq have enjoyed since the end of the last Gulf war has given solid flesh to disembodied Kurdish aspirations. But since the Iraqi Kurds are surrounded by jumpy neighbours with their own Kurdish minorities, they know what can and can't be said. Their current demands are prudently limited to autonomy within the federal structure of a new, democratic Iraq. A mild-sounding formula, perhaps, but one pitted with time-bombs.

How loose, for instance, should the federal strands be? And will the Kurds make a bid for economic independence by seizing the oilfields around Kirkuk and Mosul, now just outside their enclave? They have reassured the Americans that they will not, but Iraq's Kurds have always argued that Kirkuk fell within their fief: the Iraqi government, for equally obvious reasons, has never countenanced it. These are explosive questions, even if the Iraqi Kurds do not demand a bolder degree of self-determination from the “new order”.

The cliché about the Kurds, who number 24m-27m people (about half in Turkey), is that they are the world's biggest stateless people. This probably gives the wrong impression: relatively few Kurds outside Iraq (and a radical movement in Turkey) aspire to independence, though a great many aspire to developing their culture and building their institutions.

A nation, or ethnic community?

Nationhood was not even a cloudy aspiration until the allies, dismembering the Ottoman Empire after the first world war, delivered one of their flawed, false promises. At the Treaty of Sèvres in 1920, the Kurds were told that if, in a year's time, they elected for independence from Turkey, and the League of Nations backed them in this desire, they would get it. A defeated Turkey had been forced to accept this, but promptly made fulfilment impossible. Is America, as it looks ahead, reminding itself of the cavalier, unsustainable rearrangements flung at the region by earlier victors?

David McDowall, a knowledgeable and deeply sympathetic expert on the subject, questions in “A Modern History of the Kurds” the supposition that Kurds worldwide automatically constitute a “nation” rather than an “ethnic community”. The claim of common ancestry, he argues, is largely mythical, and Kurdish dialects, in the various host countries, are so distinct that Kurds can barely be said to share a language. The Kurds in Turkey, Iran, Iraq or Syria are often more like their fellow Turks, Iranians, Iraqis or Syrians than each other. Even the ethnic sense of identity, he argues, was born only after the first world war. In early times, the term “Kurd” meant nomad; it later became synonymous with brigandage, and still later with tribespeople who spoke the Kurdish language.

Even in Iraq, the Kurds' experience of running their own show is not encouraging. Though the region prospered compared with the rest of Iraq, partly because of the dues from smuggled oil, it was often

turbulent. For most of the 12 years, the two Kurdish chieftains, Massoud Barzani and Jalal Talabani, battled with one another, often calling in temporary allies, from Saddam Hussein to the Iranians to the Turks. It was only in the past few months that a new unity prevailed.

But whatever the divergences among Kurds, however quarrelsome some of their leaders, and however sly many of their alliances, the one incontestable fact is their oppression by host governments who, in unreasoned fear of irredentism, often ban their language and culture. Kurds, everywhere, deserve a break; maybe this war will open the way to one.

Iraq, since the Baath took over in 1968, has differed from its neighbours in its treatment of the Kurds. It allowed sham liberty, in the name of sham autonomy, but oppressed its Kurds in ways that ranged from massive population transfers to war to genocide. The murder of perhaps as many as 150,000 people in the so-called Anfal operations in 1988 means that Iraq's Kurds are unlikely to feel safe until they have cast-iron guarantees for running their own affairs—albeit linked to a new Iraqi government and sharing Kirkuk's wealth with other Iraqis.

Although this is bound to inspire Kurds elsewhere to demand more for themselves, it does not mean, given the questions about the strength of the links between Kurds and nationhood, a common rush to separatism. In any event, the fact that Kurds everywhere cannot have, or may not want to have, the same degree of autonomy, is no reason for denying it to the survivors of the Anfal massacres.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Congo's war

Turning machetes back into farm tools

Mar 27th 2003
From The Economist print edition

Spare a thought for another, much bloodier conflict

FROM your sofa, you can watch the Iraqi conflict unfold, in real time, through the eyes of hundreds of reporters “embedded” in allied units or holed up in Baghdad. The television footage of Congo's war is less gripping, because there isn't any. According to one informed guess, this forgotten inferno has claimed 3.5m lives since 1998, though there is no accurate count of the bodies, not even to the nearest million. Despite the scale of this carnage, Congo receives little attention because it poses no threat to rich countries, nor indeed to anyone outside central Africa.

On the rare occasions when outsiders do consider Congo, they tend to assume that it is beyond help. Its war is too complicated. At various points, six other African countries have sent substantial forces to attack or defend the Congolese government. In the chaos, countless rebel groups and tribal militias are slaughtering peasants and stealing their goats. The country is vast (five times bigger than Iraq), thickly forested, barely governed and practically roadless. All parties to the war are looting Congo's minerals, which gives them a reason to stay embroiled. Some also have legitimate security concerns. Rwanda, for instance, has good cause to fear the veterans of the genocide of 1994, some of whom are hiding in eastern Congo. The task of restoring peace and putting Congo back together again seems quite impossible.

Yet progress has been made, particularly in the past year. Thanks in part to South Africa's tireless diplomacy, the main combatants have been pushed into signing a series of pacts, and most foreign troops have withdrawn from Congo. A timetable has been drawn up for the installation of a transitional government, and eventually for elections. The chief stumbling block is that the eastern quarter of the country remains utterly chaotic and wholly outside the central government's control (see article).

A UN peacekeeping force in eastern Congo has proven ineffectual. It has only 4,300 troops, who spend much of their time guarding UN compounds, and tend to steer clear of places where fighting has erupted. As a result, tribal militias whose only weapons of mass destruction may be machetes and a few old guns have been able to massacre with impunity.

A proposal currently being considered is for Congo to invite the Angolan army to police its wild north-east, with UN acquiescence, but outside the UN's control. The relatively well-equipped, disciplined and battle-hardened Angolans might use more robust methods to suppress the worst of the militias. This might improve matters for a time, but the Angolans are hardly a neutral force, having fought to defend the Congolese government against Rwanda and Uganda. A better idea would be to beef up the UN force, and give it clear orders, and an even wider mandate, to stop civilians from being slaughtered.

The UN is justifiably wary of getting sucked into the Congolese maelstrom, but its inaction has unacceptable human costs. Recent history shows that the governments with troops in Congo can be swayed through diplomacy. Rwanda and Uganda, for example, both depend on foreign aid: this should be cut if they go back to war. Rag-tag bandits, however, can be kept from running amok only by the threat of force. In Côte d'Ivoire, a few French soldiers with orders to shoot to kill have curbed mayhem in the half of the country they protect. A larger and more serious UN force in Congo could force the militiamen to turn their machetes back into farming tools.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

World trade

Deadlocked in Doha

Mar 27th 2003
From The Economist print edition

The Doha round of trade talks is in deep trouble—thanks mainly to the European Union

MISSED deadlines are a hardy perennial of world trade talks. The Doha round, launched in November 2001, is no exception: a deadline of end-2002 for agreement on the compulsory licensing of patented drugs has already passed. So the failure of trade negotiators to agree by March 31st on how to cut trade-distorting farm subsidies seems almost routine. After all, say the optimists, the real deadline is a ministerial meeting in Cancun, Mexico, in September. Even then, the round is not due to finish until January 2005, and all trade rounds end in a flurry of last-minute bargaining.

Yet it would be a mistake to be sanguine about the prospects for Doha. The launch of the round took compromise on all sides, which is why a first attempt in Seattle in 1999 came notoriously unstuck. The Doha deal was struck in the wake of September 11th 2001; the Americans successfully pressed other countries to see support for the World Trade Organisation (WTO) and further trade liberalisation as, in effect, part of the response to global terrorism. Today's background of bitter divisions over war with Iraq could hardly be more different.

Besides, the round's troubles concern more than just missed deadlines (see article). Almost no progress has been made since it began, for one big reason. Although the Doha agenda is broad, embracing industrial tariffs, services, anti-dumping rules and so on, one issue lies at its heart: agriculture. Developing countries feel that they were short-changed in the previous Uruguay round, and are determined not to let it happen again. Their priority is farm-trade liberalisation. But rich countries are not ready to cut subsidies to farmers.

America is at best hypocritical over this: the monstrous farm bill signed by George Bush last May raised subsidies to farmers by 80%. But the Americans have since proposed to cut all farm subsidies to no more than 5% of the value of production, and to abolish all export subsidies. Japan has, as usual, been wholly unhelpful: unbelievably, it has proposed in the Doha talks to reduce its already tiny quota on imported rice. But the real villain of the piece is the European Union, which has failed to produce any serious proposals to reform its disgraceful common agricultural policy (CAP).

The European Commission, with support from such countries as Britain and the Netherlands, is doing its best. But last October the French president, Jacques Chirac, made a deal with the German chancellor, Gerhard Schröder, to keep CAP spending broadly unchanged until 2013. The French interpret this as putting off substantial CAP reform. France has resisted efforts to reopen the deal, even though the commission has suggested ways of redirecting CAP spending to less trade-distorting subsidies paid direct to farmers.

If agriculture is blocked, could Doha go ahead with the rest of its agenda and exclude farm trade? No. Developing countries have rightly made clear that, if there is no farm-trade liberalisation, there can be no round. So might the Doha deadline be extended? Probably, yes: the Uruguay round overran by three years, until final agreement was reached in April 1994. But France wants to retain the CAP unreformed until 2013. There is no way the Doha round could be prolonged that far without the entire system falling into disrepute.

Capping the damage

The fall-out from a Doha failure would be immense. Bilateral disputes that are now on hold, such as America's tax regime for exports or the EU's ban on imports of genetically modified food, would return. The quarrel over America's steel tariffs (ruled illegal this week by the WTO) could worsen. America could lose faith in the multilateral WTO altogether, and switch its attention wholly to trade-diverting bilateral or regional trade deals. That would seriously damage the health of the world economy, and especially that of its biggest exporter: the EU. Even Mr Chirac might balk at the colossal price that would mean paying—and all for the sake of a few coddled farmers, who make up less than 3% of the EU's population.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

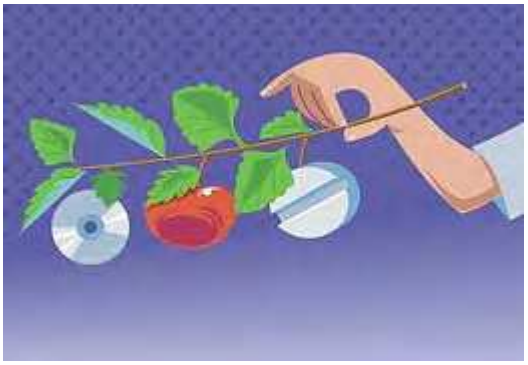
About sponsorship

Biotechnology

Saving the world in comfort

Mar 27th 2003
From The Economist print edition

Applying biotechnology to industry could reduce both costs and pollution



WHEN enthusiasts talk of sustainable development, the eyes of most people glaze over. There is a whiff of sack-cloth and ashes about their arguments, which usually depend on people giving up the comforts of a modern economy to achieve some debatable greater good. Yet there is a serious point at issue. Modern industry pollutes, and it also seems to cause significant changes to the climate. What is needed is an industry that delivers the benefits without the costs. And the glimmerings of just such an industry can now be discerned.

That industry is based on biotechnology. At the moment, biotech's main uses are in medicine and agriculture. But its biggest long-term impact may be industrial (see survey). Here, it will diminish demand for oil by taking the cheapest raw materials imaginable, carbon dioxide and water, and using them to make fuel and plastics.

Fermenting sugar into ethanol is an art as old as the ancient Egyptians; the enzymes used are slow and steady ones provided by nature. Not for much longer. It is now possible to create enzymes that work thousands of times faster than their natural counterparts. These should turn the manufacture of ethanol as a petrol additive from a subsidised boondoggle into an industry that can pay its way. Biotechnologists are also working on enzymes that can digest cellulose—the tough, fibrous plant material referred to dismissively as “biomass” and thought fit merely to be burned. Turning biomass into fermentable sugars really would give petrol a run for its money.

The plastics industry, too, may be transformed by biotechnology. This year, plastics made entirely by bacteria that have had their metabolic pathways redesigned will go on sale. And that is just the start. Soon, plastics may be grown on farms, in genetically engineered plants, rather than being manufactured in huge, centralised industrial plants.

Plastics and fuels made in this way would have several advantages. They could accurately be called “renewables”, since nothing is depleted to make them. They would be part of the natural carbon cycle, borrowing that element from the atmosphere for a few months, and returning it when they were burned or dumped. That means they could not possibly contribute to global warming. And they would be environmentally friendly in other ways. Bioplastics are biodegradable, since bacteria understand their chemistry and can therefore digest them. Biofuels, while not quite “zero emission” from the exhaust pipe (though a lot cleaner than petrol and diesel), would be cleaner overall even than the fuel-cell technology now being touted as an alternative to the internal-combustion engine. That is because making the hydrogen that fuel cells use is not an environmentally friendly process, and never will be—unless it, too, uses biotechnology.

All this will, in the end, depend on costs. But these do not look unfavourable. Already, the price of bioplastics overlaps the top end of the petroleum-based plastics market. Bulk production should bring prices down, particularly when the raw materials are free. Meanwhile, ethanol would be a lot easier to introduce than fuel cells. Existing engines will run on it with minor tweaking, so there is no need to change the way cars are made. And since, unlike hydrogen, it is a liquid, the fuel-distribution infrastructure would not need radical change.

The future could be green in ways that traditional environmentalists had not expected. Whether they will embrace that possibility, or stick to sack-cloth, remains to be seen.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Letters

Mar 27th 2003
From The Economist print edition

The Economist, 25 St James's Street, London SW1A 1HG
FAX: 020 7839 2968 E-MAIL: letters@economist.com

Hollow victory?

SIR –"Victory" in Iraq will be no victory in the war on terrorism ("What kind of victory?", March 22nd). The real war is for the hearts and minds of people around the world, and President George Bush is losing this in spectacular fashion. Admiration for America derives from a belief in its benevolence and relatively benign use of superpower status. In two years, Mr Bush has successfully projected an image of America as a selfish place where might makes right and the rich get richer. If Mr Bush's vision replaces the America I thought I knew it will be a diminished nation indeed, both locally and globally.

William Lovejoy
Ann Arbor, Michigan

SIR – You say of the sectarian differences in Iraq that "building democracy on such foundations will take delicacy and patience." I quite agree and if I thought the current American administration is capable of either I should not have been so vehement in my opposition to a war.

Philip Cresswell
Oxford

SIR – I continue to be confused by the claims of "failed diplomacy" by those who criticise Mr Bush's doctrine of pre-emption. If there was a failure, it was during the first Gulf war when George Bush senior listened to Colin Powell and failed to destroy Saddam Hussein's military capability. Soft-headedness in American foreign policy continued through the Clinton years and even into the first year of the current administration until Mr Bush was convinced of the folly of appeasement.

The world should know by now that tyrants simply will not be appeased nor will they be bought off with kind words. If there is failed diplomacy it is from those nations who believe they can safely ride the back of the terrorist tiger.

Wayne Wright
San Antonio, Texas

SIR – A regime that systematically and brutally violates individual rights has no moral right to exist. Any legitimate government that protects individual rights is morally entitled to depose it. War kills innocents but they are victims of the tyranny, not of the country that removes it.

America is not duty-bound to liberate every oppressed nation. However, by deposing a dangerous tyranny it not only fulfils its duty to protect its citizens but also liberates the oppressed. Hence, a country that allows anti-war slogans, UN power-plays and claims that "it is all America's fault" to hold its hand against a threatening tyrant fails in its duty to protect the lives and liberties of its citizens.

John Dawson
Melbourne

Bad neighbours

SIR – Intrigued by your Google searches on "anti-Europeanism in America" (401 hits), and "anti-

Americanism in Europe" (22,300 hits), I ran the searches for both Canada and Mexico (Lexington, March 1st). "Anti-Americanism in Canada" yields 9,310 hits with 5,650 hits for "anti-Americanism in Mexico". The searches in reverse give 56 anti-Canadianism hits and a resounding eight hits for anti-Mexicanism. This translates to expressed anti-American sentiments ten times greater per head in Canada than in Europe. Having lived in both Mexico and Canada, I can tell this to our European friends. If you think it is tough putting up with America from across the Atlantic, you should try living next door to it.

Todd Stephenson
Victoria, Canada

Uncharitable

SIR – In your article on al-Qaeda and the money it gets from Islamic charities, David Aufhauser of the United States Treasury says that the problem arises because these organisations have networks that reach out to the world's "breeding-grounds for terrorists" ("The iceberg beneath the charity", March 15th). After legal action against some Islamic charities, America has frozen the assets of others, including two of the biggest in the country.

A British reader is bound to ask where were the likes of Mr Aufhauser in the days when Noraid was actively funding the IRA? Even now, its website describes Noraid as "a nonprofit American organisation that provides...financial assistance to the families of those imprisoned or killed for their political beliefs" but links the visitor to a "historic Sinn Fein declaration" which includes the following: "We uphold the historic right of the Irish people to use whatever degree of controlled and disciplined force is necessary in resisting English aggression and bringing about an English withdrawal from our country for ever."

Oliver Miles
Oxford

Derivative argument

SIR – Warren Buffett suggests that derivatives are so complex, and are based on outcomes so distant, that parties on both sides of the same bet—in reality, a zero-sum game—are able to book a notional profit ("Off target", March 15th). That in turn means bumper bonuses today and who cares about the chickens that will take five or ten years to come home to roost? Might not that be the main reason why derivatives have grown from nothing to a $128 trillion industry in the space of a generation rather than the supposed usefulness you claim for them?

Patrick Hosking
London

SIR – While Mr Buffett undoubtedly has a point about the current problems in derivatives accounting, his inflammatory rhetoric does a disservice to derivatives in general. He forgets that derivatives, like all technologies, are only as dangerous as the people who create and use them. Perhaps a screening of "Dr Strangelove" is in order at the next Berkshire Hathaway annual meeting.

John Matouk
Miami Beach, Florida

The greater good

SIR – Your article on punishment has implications for the present international situation and gun control ("Pro bono publico", March 15th). If the structure of society is dependent on "altruistic punishment", then perhaps the evolution of international society may be too. So "unilateralism" takes on a different meaning. In the likely event of regime change in Iraq, and a lifting of sanctions, America will have acted altruistically in favour of, among others, TotalFinaElf and French drivers.

Alternatively, if a farmer in England defends his home with a shotgun, he goes to jail. But, in traumatising the surviving burglar to the extent that he can no longer pursue his trade, he has acted altruistically. Interviews in American prisons show that there is nothing more feared by professionals than a fearful, angry and armed homeowner.

Charles Warren

San Francisco

Unknown quantities

SIR – Can you please define some of your quantitative terms? How big is a “raft” (“Gerhard Schröder's last chance”, February 8th) and how many of them are there in a “swathe” (“Give a dog a bad name”, February 22nd)? How many “tads” (“A last, last chance”, March 8th) make a “slew” (“A (going) private matter”, March 22nd)?

Robert Tyrrell
Bettona, Italy

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

War in Iraq

Off with his head

Mar 27th 2003
From The Economist print edition

Getty

A week into the war, the world awaits the battle of Baghdad

Get article background

IT LOOKED like a whimper, but the modest salvo that opened the second Gulf war can, with only a little hindsight, be seen as a sort of précis of the bang that has followed. The opportunistic attempt to kill Saddam Hussein, and perhaps obviate a full-blown war, seems to have failed. Soon afterwards came a headlong American drive to Baghdad, whose aim is to decapitate Mr Hussein's regime rather than (or as well as) the despot himself. Like the assassination attempt, the ongoing campaign has been distinguished by the efforts of the American-led coalition to spare, even succour, most Iraqis, while striking at their rulers in and around the Iraqi capital.

"Operation Iraqi Freedom", as the Pentagon has christened this singular war, is the most intimately reported conflict in history. But all those embedded journalists have created a fog of information that can obscure the whole. And all things considered—including the brevity of the war so far—the whole is going rather well. The American thrust up the Euphrates valley has advanced at an extraordinary rate, which the German architects of *Blitzkrieg* would have admired. The spearhead of America's Third Infantry Division has advanced to within around 50 miles (80km) of Baghdad. Vital bridges over the Euphrates at the town of Nasiriya have been seized. American marines are also approaching Baghdad a little way to the east, in the direction of Kut.

To sustain the pace of this advance, coalition forces have intentionally and unusually bypassed what have become euphemistically known as "pockets of resistance". As General Tommy Franks, the war's overall commander, puts it, "some terrific firefights" have erupted behind the point of the spear, some in places that were thought to have been subdued. Local Baathists, the Fedayeen of Saddam, other militia groups, and some regular troops have engaged coalition troops at Nasiriya, Najaf and elsewhere. Technologically inferior, they have employed age-old, often dishonourable tactics: disguise, fake surrender, the coercion of civilians into battle and the use of human shields in sensitive locations, such as a hospital in Nasiriya, from which they

have been difficult to dislodge. The long coalition supply lines, along which much-needed ammunition, food, fuel and water are ferried, have been vulnerable to guerrilla-style raids.

To the soldiers involved and the journalists accompanying them, these firefights can seem apocalyptic. But as Michael O'Hanlon of the Brookings Institution puts it, they have not inflicted any “strategic harm”. Coalition commanders have calculated that such skirmishes are a price worth paying for arriving on Mr Hussein's Baghdad doorstep swiftly. General Richard Myers, the chairman of the Joint Chiefs of Staff, says that plans are in place “to deal with those onesies and twosies” who are stinging the spear's flanks. The pressure on supply lines might be eased by making greater use of airfields that have been seized in the west and south of Iraq. Overall, though, on the high road to Baghdad, so far so good.

There have been other setbacks. Before the 1991 war, the record of Iraqi troops against Iran created an assumption that they would fight hard; in the event, many didn't. This time, coalition commanders have been surprised by the tenacity of irregular Iraqi units. The *fedayeen*—or “black pyjamas” as their attire has led them to be known—were perhaps especially underestimated. Compared to the Gulf war, the coalition has taken few prisoners, though it claims that desertions are making up some of the difference.

At the same time, the welcome extended by the civilian population in Shia-dominated southern Iraq, which has little reason to love Mr Hussein, has been disappointingly cool. A reported uprising against the Baathists in the southern city of Basra on March 25th—supported by Britain's Seventh Armoured Brigade, the “Desert Rats”, stationed outside the city—seems to have been quelled. That has been the only real sign of revolt so far. Such reticence is not altogether surprising: an even slightly mis-timed rebellion could prove disastrous for the rebels. The abandonment of the Shias and Kurds to their fate during the rebellions that followed the 1991 war can hardly have inspired confidence. America has itself advised Iraqis to stay at home and off the streets.

So there are good reasons why Saddam iconography has not been torn down and trampled across southern Iraq. But, combined with the tenacious Iraqi resistance in some places, this tepid reaction has enabled Mr Hussein to do much better in the propaganda war than he is so far doing in the military one.

The coalition continues to bombard Iraq with leaflets and by radio, as well as with laser-guided munitions. Publicly expressed doubts about the authenticity of Mr Hussein's various media appearances, and talk of negotiations with Iraqi commanders, are all part of the coalition's psychological war. The wars from the air and on the ground have also been conducted in a way designed to demonstrate that ordinary Iraqis are not being targeted.

But this very restraint may have emboldened the Saddamites and discouraged their opponents, perhaps lending credibility to the former's claims that the war is going swimmingly. Despite a belated and botched attempt, on March 26th, to take it off the air, Mr Hussein's propaganda is still broadcast on Iraqi television. (The outrage prompted by the bombing of a television station in Belgrade may have made America over-sensitive about media targets.) Mr Hussein has also been able to hit the coalition where it hurts most: in the consciences of their electorates, and the public opinion of the wider world.

Aside from the night of March 21st, the bombardment of Baghdad and of other cities such as Kirkuk, Mosul and Tikrit by aircraft and cruise missiles has been less destructive than was widely expected. By and large, it seems to have been as accurate as the Pentagon promised (see article). But weapons malfunction, intelligence and humans err, and there have been civilian casualties (or “martyrs”, as Mr Hussein's men call them), some of whom have been buried amid choreographed outrage reminiscent of Ramallah and Gaza. On March 26th, numerous civilians were reportedly killed when a Baghdad market was struck, though the Americans tried to deny responsibility. An interruption to the electricity and water supplies in Basra, a city of more than 1m people—caused, America says, by Iraq—has threatened the health of its population, obliging some of them to wash in and drink dirty river water. Efforts to bring in humanitarian aid through the southern port of Umm Qasr were delayed by stubbornly protracted fighting around it and the need for de-mining operations in the surrounding water, assisted by specially trained dolphins.

Then there are the coalition casualties and captives. Footage showing captured American troops

(“mercenaries”, say the Iraqis) led to American accusations that Iraq was violating the Geneva Conventions, which prohibit the subjection of prisoners-of-war to “insults and public curiosity”. (Iraq is indeed violating them. But captured Iraqi soldiers have also been used, if less brutally, for propaganda purposes, and the treatment of America's Afghan prisoners at Guantanamo Bay has undermined America's moral indignation.) Some coalition soldiers may have been executed by their captors, though many of the coalition fatalities have occurred in helicopter accidents and friendly-fire incidents, which were also a cause of much anguish in 1991. In one such incident, a British Tornado aircraft was shot down by a Patriot missile battery. The Patriots are designed to intercept incoming missiles, and have prevented several Iraqi ones from hitting Kuwait.

In fact, given the nature of the operation, coalition casualties have been light. (In a battle for Nasiriya with the Ottomans in 1915, the overconfident British, whose supply lines were also stretched thin, lost 500 men.) Iraq has suffered an unknown but far higher number of combat casualties: several hundred Iraqis were reportedly killed in an engagement at Najaf on March 25th-26th. But the response at home to such coalition casualties as there have been—some commentators have been asking whether American troops are fighting too leniently and riskily—suggests that September 11th may not, after all, have made Americans so much more sanguine about seeing their troops die. This will no doubt have buoyed Mr Hussein.

Waiting for B-day

As well as obscuring the success of the advance on Baghdad, the televisual drama and individual tragedies have distracted attention from the coalition's other successes, which largely involve the prevention of various widely-predicted catastrophes. Even if he intended to, Mr Hussein has not been able to scorch or flood much Iraqi earth: Iraq's southern oilfields and terminals have been secured with very little environmental or economic damage. Israel has not been attacked or entangled, perhaps because of the occupation of airfields and other sites in Iraq's western desert by American, British and Australian special forces. Chemical and biological weapons have not been used, despite some indications that they may have been primed (though none has been discovered by the invaders either).

These calamities, however, may still materialise. The main proviso in any judgment about Operation Iraqi Freedom is that its central confrontation—the battle for Baghdad—is yet to begin properly. When it does, and when Mr Hussein faces a pressing, existential threat, he may resort to any or all of the above.

As several military veterans have pointed out, taking on the Republican Guard divisions arrayed around Baghdad would be easier were America's Fourth Infantry Division advancing on the city from the north, as would have been the case had Turkey been more hospitable. As things stand, Turkish airspace has been opened to B-52 bombers flying in from Britain, and an Islamist terrorist group based in the north, fingered by the Americans as a conduit between Mr Hussein and al-Qaeda, has been bombed, as have several northern cities. A small number of American boots are on the ground in the northern Kurdish enclave (how many Turkish troops are in Iraq, or are likely to be, remains unclear). The Americans may organise an insurgency by Kurdish *pershmergas*, along the lines of their collaboration with the northern alliance in Afghanistan. But there will be no heavy force advancing on Baghdad from the north.

Coming up from the south are elements of America's Third Infantry Division, First Marine Expeditionary Force and 101st Airborne Division. They will be able to deploy their superior tanks and artillery, Apache helicopters and the coalition's aircraft. Facing them are three of Mr Hussein's six Republican Guard divisions, with other loyal forces stationed inside the city. At least one Apache was shot down when a flotilla of helicopters launched a raid ahead of the northern tip of the spear; but fixed-wing aircraft have also begun to pummel Republican Guard divisions outside Baghdad and dig into its outskirts. The more troops and tanks that the Americans can prevent from moving back into the heart of the city, the better. Given the determination that the *fedayeen*and others have already displayed, the prospect of large-scale urban warfare looks increasingly likely, and daunting.

On March 26th, sandstorms around Baghdad slowed the coalition advance. A pause might enable British and American forces to tackle the resistance further south, and perhaps allow some time for other American units destined for Kuwait to catch up: Donald Rumsfeld, the defence secretary, has been stung by accusations that his invasion force is too light, and that he himself is over-infatuated with air power and gizmos. As things stand, the tip of the American spear has reached the vicinity of Karbala, where another Hussein, the Prophet Mohammed's grandson, was infamously decapitated in the year 680. Another decapitation may soon follow.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

The scene in Baghdad

Good days for pigeon-sellers

Mar 27th 2003 | BAGHDAD
From The Economist print edition

A resilient city tries to carry on as though the raids were not happening

Reuters

Get article background

ON MARCH 22nd, the Iraqis lit trenches filled with oil around Baghdad. Huge columns of black smoke billowed hundred of metres into the air. This, it was hoped, would confuse the guidance systems of some missiles, causing them to miss their targets. By the next day, the city felt as though it was encased under a cold grey dome. On March 25th, a vicious, blinding sandstorm whipped the streets of the city, leaving the air full of dark brown dust. The next day, a missile hit a busy street in the poor northern suburbs and killed at least 15 people—the city's first significant civilian casualties. Confusion, perhaps, had had its effect.

Most people would be horrified and frightened if their capital came under attack. The problem for the Americans is that the average Iraqi, let alone the average Baath Party loyalist, does not react that way. During the 1980s they lived through eight years of war with Iran in which a million people—Iraqis and Iranians—died. In 1991 they fought the Gulf war and Baghdad was bombed. The Americans bombed it again in 1998, and for the past 12 years Iraqis have lived through the deprivation of sanctions. They have become resilient and defiant. Even strikes such as that on the 26th are followed by cries of “Allahu Akhbar!” and “We'll give our blood and soul for Saddam!”

After the intense bombardment of the night of March 21st, which lit up the night sky, the bombings and missile strikes subsided, or at least changed their nature. Instead of taking place in short intense bursts, they were strung out through the day and night. Although the number of attacks in central Baghdad fell, the low rumbling sound of bombing by B-52s of targets on the southern outskirts of the city rolled towards the centre.

Most Baghdadis found all this reassuring. Until then, no one knew what the doctrine of “shock and awe” actually meant. If what Baghdad had witnessed after one week was indeed this, then the result was an almost audible collective sigh of relief. With a few exceptions, the targets hit were Mr Hussein's many palaces, several official buildings, including the headquarters of Iraqi television (which continued broadcasting) and an unknown number of military and communications sites. Most of the buildings were probably empty and most, but not all, of the strikes appeared to be highly accurate.

Despite the massive number of missiles fired and bombs dropped, relatively few civilians were hurt, and most of those suffered only light injuries from shrapnel or from Iraqi anti-aircraft shells that failed to explode and fell back into the city. (By March 27th, the official Iraqi casualty toll was 44 dead and several hundred wounded.) Since, by most appearances, civilians were not being deliberately targeted, some normal life began to resume.

Even during bombardments, Baghdad's British-style red double-decker buses have continued to trundle around town and, during the day, traffic has moved along the roads. Some shops and restaurants have reopened and, if an explosion is close, waiters and customers rush outside to see if they can spot what has been hit. Groceries and bakeries are open, though schools and universities are shut. Shrewd businessmen are doing a roaring trade in items people will need if the situation gets worse: kerosene cookers, rechargeable lamps, batteries and torches.

Business has also been good in unusual areas. At Baghdad's animal market, traders report a surge in demand by pigeon fanciers: probably, said one trader called Yusuf, “because people have nothing to do”. Some clearly think they will have something to do, though. Down Baghdad's main Saadoun shopping street, Abdul Wahab, who sells leather goods and luggage, reported a huge demand for hand-crafted pistol-holsters. The Iraqi dinar, which went into free fall as the strikes began, recovered its losses as the dollar fell back to almost the same exchange rate as on the eve of the conflict.

Worryingly, and presumably much to the irritation of American and British officials, it is not just ordinary Baghdadis who have begun to relax. Mr Hussein himself has appeared on television looking calm and assured. Citing both the Koran and classical Arabic poetry, he has urged his people on to *jihad*, to “behead the invaders” and “cut off their hands”. By naming commanders and tribes for their valiant defence of the country, the president skilfully gave credit where credit was due rather than calling any victories his own.

Every day his ministers have given press conferences in which they pour scorn on the invading armies and their leaders. In fact, the Americans and the British have thrust deep into the country, and so far have mostly had to fight only determined small units. But rosy claims of quick victory in Britain and America, together with the capture of a small number of American troops, have helped the regime. Now ministers rubbish all coalition claims, and Iraqis are far more inclined to believe them.

Iraqi television has been used to good effect. Mr Hussein offered cash rewards for the shooting down of American and British aircraft and the capture of any of their men. The next day, television featured a film of happy farmers who, it was claimed, had brought down an Apache helicopter on their own. The authorities are milking such events for all they are worth. The message is that, if an ordinary farmer can take on the mighty Americans and win, then you can too.

The net result of all of this has been striking. On the eve of the bombing, many Baghdadis had been talking openly to foreigners; a week later, as mass uprisings failed to materialise and as ministers crowed of imminent American defeat, they were clamming up once more. On the one hand, the city was bracing itself for the final assault by the rapidly advancing allies; on the other, because the war has not proceeded quite as smoothly as some predicted, many Baghdadis simply did not believe reports that the Americans were close to the city's gates. And, even if they were, they could scarcely believe that the Americans would actually risk the potential chaos of street fighting.

Although the allies have no desire to engage the Iraqis in a fight for every street corner, that is what may lie in store for them. Across the city, thousands of men have been digging foxholes and trenches. There are armoured vehicles on the streets, and a mobile Scud-launcher is reported to have been seen near where the missile fell on March 26th.

Hundreds of small groups of armed men are waiting to fight. Some are from the army or other formal military units, but many are not. A good proportion are from the armed militia of the ruling Baath Party, joined by members of a linked militia known as the Fedayeen of Saddam. Most have some sort of uniform, but others are irregular units in civilian clothes.

How many of these men will actually fight remains, of course, the great unknown. The vast majority of Iraqis are simply waiting out the war. But, as people of several races and creeds, they have as diverse a view of what is happening as you might expect. Some may secretly support the invasion. Most probably dislike Mr Hussein, but a significant number have some form of clan, tribal or political affiliation to him. Some of those who hate him, if they knew for sure that the regime was about to collapse, would be tempted to take up arms against it. Others would not think Mr Hussein's imminent demise a good enough reason to approve or support an American-led invasion.

Four years ago, the NATO bombing of Serbia briefly encouraged some Serbs to rally round their otherwise hated leader, Slobodan Milosevic. A campaign that the optimists said was meant to last three days dragged on for almost 80. A lot depends on whether Iraqis behave like Serbs.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

The Kurds in northern Iraq

Waiting quietly, on best behaviour

Mar 27th 2003 | ARBIL
From The Economist print edition

Heartened by Turkey's self-restraint, the Kurds promise more of their own

Get article background

THE pre-war bravado about liberating the “occupied” and oil-rich Kurdish lands around the cities of Kirkuk and Mosul has hushed. Now there is little that the Kurds in northern Iraq can do but wait. Their lightly-armed *peshmerga* fighters have hunkered down in the hills along the front line with the Iraqi army, keeping their notoriously twitchy trigger-fingers under admirable control. With their ageing Kalashnikovs and RPGs, they face three Iraqi army corps, armed with an arsenal of rocket-launchers, tanks and artillery.

“We are adopting a defensive posture and won't make any unilateral moves without the agreement of our allies,” said a seasoned *peshmerga* commander from the Kurdistan Democratic Party (KDP). He said he was trying to keep the front calm until an allied plan for the region is in place. Surrounded to the west, north, and east by suspicious, sometimes hostile, neighbours, and to the south by a regime that has tried to erase them, the Kurds in the self-rule enclave know that one wrong move now and all they have gained in the past 12 years could be lost.

The political leaders have done much to tone down nationalist passions. They are shedding their warlord identities, which lost them so much international goodwill during the bloody war between the KDP and the Patriotic Union of Kurdistan (PUK) in the mid-90s. The two leaders, cautious Massoud Barzani and his long-time rival, ebullient Jalal Talabani, now jointly affirm Iraq's territorial integrity.

The Kurds have no demands, they say, other than wanting to run their own area within the framework of a post-Saddam government in Baghdad that will be federal and democratic in nature. They have urgent reason to be reassuring. Turkey has repeatedly threatened to invade the north should the Kurds declare independence. And if that were to happen, Turkey's regional rival, Iran, might also intervene.

The precarious nature of the Kurds' existence—made worse by the lack of gas masks, and the continued absence of American soldiers in significant numbers—helps to explain why so many left their homes at the onset of war. In Dohuk and Arbil, close to the Iraqi front, thousands of families packed their bags and headed for sanctuary in the hills and mountain villages. But there was no repetition of the scenes in 1991 when Kurds fled in their millions to the frontier. This time, village leaders opened their guest houses, and schools and village halls became temporary hostels.

The initial anxiety lightened last Monday with the first bombing of Iraqi military positions along the northern lines. To the Kurds, this was a signal that they were not, as first thought, forgotten. The arrival of American special forces, and of Major-General Henry Peter Osman as the “military and humanitarian co-ordinator”, also helped to reassure them. And hopeful news came on March 26th, when the Turks said they would not after all intervene—unless it was felt absolutely necessary.

In return, the Kurds have given guarantees to America and Turkey that they will not seek independence or march on Kirkuk or Mosul. However, there is a general Kurdish belief that the fall of the two cities will be brought about by organised uprisings among the large Kurdish populations who still live within their limits.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

America and Turkey

A friendship on hold

Mar 27th 2003 | ANKARA
From The Economist print edition

AP

Turkey's promises were always too hard to keep

Get article background

AS AMERICA and Britain keep up their war against Iraq, the finger of blame is turning towards one country for the higher risks being run by the coalition forces. By denying thousands of American troops the use of Turkish soil as a launching pad for a second northern front, Turkey stands accused of throwing Pentagon war plans into disarray and, with them, more than 50 years of strategic partnership with the United States.

“In tatters”, is how Morton Abramowitz, the American ambassador to Ankara during the 1991 Gulf war, described the strategic partnership between America and Turkey in a recent editorial. “The Turks were until last week Saddam's allies, now they are just about neutral,” says another American official, referring to Turkey's belated decision, after much wrangling, to allow coalition planes to use Turkish airspace in raids against Iraqi targets. Much of the blame is being piled on Turkey's ruling Justice and Development Party (AK): a party new to power, whose lack of experience, critics feel, has done much to cause the current mess.

When America's deputy secretary of defence, Paul Wolfowitz, first sought Turkey's help in a war in December, he came away saying he had “very strong” support from all levels of government. In exchange for economic aid ($4 billion, later haggled to $6 billion), Turkey would allow as many as 60,000 American soldiers on its territory and the upgrading of at least ten air bases and two ports.

A still-secret memorandum of understanding, signed on February 8th, apparently allowed the Americans to set up at least nine logistic bases in the country's predominantly Kurdish south-east provinces. American warships, loaded with combat materiel, began docking at Turkey's south-eastern port of Iskenderun. But on March 1st the Turkish parliament refused, by three votes, to approve the troop deployment. Tayyip Erdogan, the AK leader, had underestimated the strength of opposition among his own deputies. So, too, had the country's generals.

The Americans were infuriated. Surely, they argued, had Mr Erdogan and the generals really wanted it, the bill would have passed. Maybe so; but other factors contributed to the parliament's reluctance. The Americans seemed to be asking Turkey to help with a war George Bush had not yet publicly declared he would wage, while much of the rest of the world was still scrambling to find a peaceful way out.

Besides, Turkey's and America's interests have never been so directly in conflict. The Turkish army has long feared that the removal of Saddam Hussein could encourage the Kurds of northern Iraq to declare independence, which is why they wanted to send thousands of their own troops into the Kurdish enclave to prevent this from happening. The Bush administration's natural refusal to provide written guarantees that it did not support Kurdish independence only deepened Turkish suspicions that the Americans had a secret agenda in northern Iraq, though this was, and is, unlikely. For the government, bloodying its hands in a war against fellow Muslims without UN sanction would have angered not only its many openly pious constituents but millions of other Turks who had helped it to power.

Above all, the presence of thousands of American troops in the country's troublesome Kurdish provinces was simply intolerable. Why then, did Turkey lure the Americans along? For that, both the generals and the government share blame. They should have told the Americans from the start that the best they could do was open their airspace, which is what they ended up doing, and no more than that. Allied war planners would have saved much time and, yes, perhaps British and American lives. In the event, AK leaders, and the then prime minister, Abdullah Gul, may have presumed that a northern front was indispensable to the Americans and that, by dragging their feet, they could avert war. Turkey's former foreign minister, Yasar Yakis, admitted last week that Turkey never believed that the Americans had a fallback position.

To make matters worse, when America's secretary of state, Colin Powell, at last let it be known that his government now wanted nothing more than overflight rights, to which the Turkish parliament agreed on March 20th, the government denied the Americans use of Turkish airspace, saying it wanted them to agree to the deployment of thousands of Turkish troops in northern Iraq. The Americans wisely said no, chiefly because their Kurdish allies have threatened to fight the Turks should they come in large numbers, and the government backed down.

Turkey's businessmen, who had been heavily counting on American aid, are in shock, as is the Istanbul stockmarket. The mainstream press, strongly in favour of support for the Americans, complained that the government had now achieved Turkey's complete isolation.

So is this the end of a steady friendship between Turkey and its most important ally? It cannot be, since, thanks to its geography, the country remains a strategic pivot. It is NATO's only Muslim member, a strong friend of Israel and, for all its flaws, a western-style democracy. It was no accident that President Bush this week sought congressional approval for $1 billion of aid for Turkey, which it can use to acquire loans of $8 billion or more. And on March 26th Turkey's chief of the general staff, Hilmi Ozkok, announced that he wanted Turkish troops to enter northern Iraq only in full co-ordination with the Americans. The Turks, said one American official, “still have a chance to prove that they remain our friends.”

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com SPECIAL
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Diplomacy, continued

The reckoning

Mar 27th 2003
From The Economist print edition

After the war, no peace?

Get article background

ANY hopes that the start of the fighting in Iraq would quiet the opposing big guns in the United Nations Security Council have been swiftly dashed. Ahead of his trip this week to Camp David to meet George Bush for a war-and-peace summit, and to New York to confer with Kofi Annan at the United Nations, Britain's Tony Blair ruefully acknowledged that once the war in Iraq had ended, there would need to be a "reckoning" in relations between America and Europe. Yet new skirmishes have already broken out in the Security Council. France, Germany and Russia have made it clear that they will oppose any effort to include the UN in post-war reconstruction in Iraq in ways that might appear to legitimise a war they still oppose.

Putting down his marker for that bigger post-war reckoning, Germany's foreign minister, Joschka Fischer, this week told *Der Spiegel* magazine that "A world order in which the superpower decides on military strikes based only on its own national interest simply cannot work." Germany's chancellor, Gerhard Schröder, called for a new debate about how to deal with the spread of weapons of mass destruction. But he has said that Germany will help with the post-war reconstruction of Iraq, provided it is co-ordinated by the UN.

His development minister, however, suggested that a different reckoning might come sooner and be bloodier: "Those that do the damage carry the main burden for reconstruction," she insisted, implying that America and Britain should bear the cost of rebuilding Iraq themselves. With tempers still raw, last week France's Jacques Chirac took a similarly hard line, threatening again to use his veto to prevent America and Britain from securing a peace to their liking through the UN, just as he blocked a resolution that might have condoned their going to war.

Yet work is already well advanced on a resolution, requested by Mr Annan, that would give him maximum flexibility to vary the UN's oil-for-food programme in Iraq in order to get relief supplies into the country rapidly, once it is safe to do so. Before the war, the programme helped feed some 60% of the Iraqi population; after the fighting, it will have to feed more. Until then, America and Britain have lined up relief supplies to tide people over in the areas they control. Yet Russia and Syria have dragged out discussions of Mr Annan's request, with Russia insisting on assurances about contracts still pending, many of which went to its own companies.

A far more difficult debate is expected over what should happen in Iraq once the war is over. The UN, all agree, has a big role to play, but what should it be? For their different reasons, America and France are most sceptical. As Mr Chirac's veto threat implied, France is determined not to let the UN do anything that will seem to legitimise America's control over Iraq once the fighting stops. Some in Mr Bush's team are reluctant to return to the UN with veto-wielding France still in such truculent mood, calculating that they can count on Iraq's future oil revenues to pay for most of the reconstruction.

But those revenues are still governed by past UN resolutions. Mr Annan has been at pains to point out that the UN can do little beyond emergency humanitarian relief without fresh authorisation from the Security Council. British officials want a big UN role because they see the rebuilding of Iraq as both an enormous burden to be shared and a way of pulling estranged allies together, rather than as a prize to be fought over between Americans and Europeans. They point to Kosovo as a model: a robust military force that was not under a UN mandate worked effectively alongside a UN civil administration that was able to pull together the strands of the aid and civil administration effort.

But Kosovo was a NATO military operation, and France, far from seeking to block it, was very much a partner. This time, Europeans are deeply split. Among his contributions to the eventual reckoning with America, Mr Chirac has been musing out loud about putting some sort of “declaration of independence”—presumably from America—in the new EU constitution now being drafted. On March 27th his foreign minister, Dominique de Villepin, talked more diplomatically to the IISS, a London-based think-tank, of a new world based on “a number of regional poles”.

Meanwhile Belgium, with exquisitely poor timing, has invited Germany, France and Luxembourg (all part of the European rejectionist front) to a special summit in Brussels next month to discuss setting up a “hard core” of countries willing to push ahead faster with a common European defence. This was not, Germany's Mr Schröder hastened to add, an effort to exclude anyone or to work against NATO. But that is the way it will look to American and British officials just now.

In other words, it is not just the Security Council that remains divided. The only question is whether the post-war reconstruction of Iraq will help heal these divisions, as Mr Blair hopes, or worsen them. For their part, UN officials are quietly hoping that, once the fighting ends, all sides will discover an interest in building the new Iraq and rediscover the spirit and art of compromise.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Al-Jazeera

Coming of age

Mar 27th 2003 | DOHA
From The Economist print edition

The Qatari TV channel makes friends and enemies

THE war, al-Jazeera executives hoped, would be a global coming-out party for their station. Some party: on March 23rd the Qatari television channel aired graphic footage, provided by Iraqi television, of corpses of American soldiers, and dazed American prisoners-of-war being questioned in broken English. It ushered in the latest row for a channel that, in its seven-year history, has drawn the ire of the American government and a host of Middle Eastern regimes.

Iraq is the first-ever Arab war to be covered live and on satellite by Arabs, and al-Jazeera, financed by the Qatari government and staffed with veterans from the now-defunct BBC Arabic TV Service, came prepared. No news-gathering organisation can match the number of reporters and cameras that it has on the ground in Iraq, and most western networks are at least partially dependent on the al-Jazeera feed from Baghdad.

Al-Jazeera claims 45m Arabic-speaking viewers, making it a key factor in the American effort to win the hearts and minds of the Arab world. Before the war, the Americans in Doha were wooing it with charm. And, though its reporters have been banned from the New York Stock Exchange, Colin Powell is still happy to be inteviewed on it.

Did al-Jazeera's use of the Iraqi footage cross an ethical line? No, says the channel. A station spokesman points out, correctly, that it has never shied away from showing the gruesome realities of war. Outrage at the displaying of American bodies is proof, it says, of western double standards.

The station has ambitious plans for the next follow-up. An English-language website opened on March 24th, and staffers talk proudly of taking their message to the English-speaking world. But the current sour atmosphere is making this a little harder. Website executives claim that AOL and Yahoo! are now refusing to run their advertisements.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Arab protest

Damning and damned

Mar 27th 2003 | CAIRO
From The Economist print edition

Aroused by Iraq's resistance, Arab crowds are angered by their leaders

Get article background

AP

Nerve-wracking days

IRAQ'S vice-president, Taha Yassin Ramadan, has a predictably low opinion of his fellow Arab leaders. Mr Ramadan, speaking before cameras to prove he had survived the first bombs on Baghdad, said Arab leaders come in three flavours: those who collude openly with America, those who do so secretly, and those who avoid decisions altogether, while unleashing their police to suppress popular rage.

The Arab public broadly shares Mr Ramadan's contempt. After a week glued to the gore on satellite channels, their mood is one of fury against America, pride in Iraq's defiance, and frustration with their own governments. They are shamed by their leaders' weakness in the face of America. Not only are many governments complicit with the war effort; their feeble diplomatic attempts to prevent war were less effective than those of non-Arab powers, such as France and Turkey.

Anti-war demonstrations in Arab capitals have yet to attain the scale of those seen in Europe before the war. Even so, given the range of repressive instruments in the hands of Arab states, both the turnout and tenor of protests have been eye-catching. In Sudan and Yemen, demonstrators were killed in clashes with police. Half a million Syrians braved foul weather to stomp through the centre of Damascus. Some 40,000 people stalled Cairo's main square for ten hours, dispersing only after police dragged off and beat up several hundred, including two members of parliament. The square has remained an armed camp in anticipation of even rowdier protests to come.

Two factors have emboldened Arab protesters. The first is that Iraq, battered and despised as its regime is, appears to be winning the propaganda war. This is partly due to early boasts and blunders by American and British forces. The targeting of a busload of Syrian workers heading home from Baghdad, for example, brought bereavement directly into Syrian homes. And the brief raising of an American flag over the port of Umm Qasr, a contravention of orders that happened to be captured on Arab screens, convinced some that this is indeed a war of occupation.

Arab television audiences have also been surprised to find that, in contrast to previous wars in the region, their own news channels are proving at least as reliable as western ones. Round-the-clock news stations, such as al-Jazeera, Saudi-owned al-Arabia and Abu Dhabi TV, maintain larger networks of correspondents inside Iraq and rarely flinch from airing graphic content. Iraqi officials have also been assiduous at courting the press, punching home the message that they are fighting to defend faith and fatherland.

The second factor is the failure of many Arab governments to provide adequately for their own people. Demonstrators in impoverished Syria are too afraid to criticise their own corrupt regime, whose only proven competence, in any case, seems to lie in diverting domestic criticism to foreign affairs. But other economically beleaguered governments are either less effectively repressive, or have proved less nimble at aligning themselves, rhetorically at least, with Iraq's resistance.

The shakiest right now is Egypt's. For Hosni Mubarak, the timing of this war could hardly be worse. Depressed for five years, Egypt's economy has sunk further in the past month. A 20% currency

devaluation has fuelled sharp price rises, even as tourism, a big hard-currency earner, faces a wartime collapse. America has bailed out this key Arab ally in the past. It is overstretched with other commitments just now, and also miffed by Mr Mubarak's unwillingness to offer open support.

Small wonder that Cairo's demonstrators shouted curses at their own leaders as well as at George Bush, or that police turned most brutal when the crowd surged towards the headquarters of Mr Mubarak's party, apparently with the intention of attacking the giant presidential portrait that hangs there. As Syria's leader, Bashar Assad, said recently, being America's enemy these days may be dangerous, but being its friend could prove fatal.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Jordan and Iraq

Volunteers for the war

Mar 27th 2003 | AMMAN
From The Economist print edition

Iraqis are leaving Jordan to fight, rather than coming in as refugees

Get article background

WITH something of the passion of young Europeans joining the Spanish civil war in the 1930s, Arabs are heading for Iraqi front lines. Iraqi embassies across the Arab world are recruiting volunteers armed with a passport, two photos and a ticket to Damascus. Drivers for Uday Hussein's bus company, al-Dhilal (The Shadows), say he has laid on a free service from the borders back to Baghdad. Jordanian officials, fresh from erecting refugee camps, are handling less an Iraqi influx than an outflux of the kingdom's 300,000 Iraqi exiles.

Since the war began, they say, some 4,000 Iraqis have headed home, egged on by a Jordanian amnesty for Iraqi over-stayers. Among them are scores of young Shias, boarding the 20 buses departing from Amman each day, vowing to resist American operations round the southern towns. Their parents fled Saddam Hussein's persecution, but admit that American bombing of their homeland has divided their loyalties.

Some Jordanians clamour to go with them, and say they would if only their king would let them. Civilians now require a government pass to enter within 160km (100 miles) of the border, declared a military zone before war began. Some go through the backdoor of Syria.

The flow of people out of Jordan has startled the UN, which admits that its estimate of 600,000 refugees now seems inflated. That bleak forecast helped to bring in $27m—a handsome sum for the two or three Iraqi refugees to enter Jordan since war began. In 1991, the waves of displaced people started after the war.

Also stunned is King Abdullah, who is back-pedalling hard from his support for the Americans. On television, he tells his people that he shares their pain at the bombing (but asks for only “civilised” displays of wrath) and insists that the role of a reported 6,000 American troops in the kingdom is solely defensive. In a right royal U-turn, he has reprieved two of the five Iraqi diplomats expelled from Amman and called on Baghdad to send more—and the Central Bank has denied receiving orders to freeze Saddam Hussein's deposits.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

American public opinion

Still all signed up

Mar 27th 2003 | WASHINGTON,DC
From The Economist print edition

Getty

On the home front the first week went reasonably well. But if the war gets harder, Americans may demand a different sort of fight

Get article background

GEORGE BUSH is engaged in one of the most difficult tasks of any American president: maintaining domestic support for a limited war. History teaches that Americans are prepared to accept and inflict massive casualties in pursuit of victory (witness the campaign against Japan in the second world war). But as both the Vietnam quagmire and the first Gulf war suggest, they are much more nervous about backing a government perceived to be pursuing half-hearted aims.

The current combat has limited aims. It seeks to remove Saddam Hussein and his regime without massive damage to Iraq's civilian population and infrastructure. Hence the surgical strikes against the leadership and rules of engagement that seek to limit Iraqi civilian casualties, even at the risk of increasing American ones. The aim is to strike a balance between the military success needed to buoy domestic support and military restraint needed to win over Iraqi (and world) opinion.

From a domestic perspective, the first week has worked reasonably well. The willingness of the American people to tolerate casualties while the war is going roughly to plan has meant public support for the war has survived a week of deflated expectations.

Before war broke out, the administration's conservative backers had made the case for war to the public by raising expectations. Ken Adelman, a former assistant defence secretary, notoriously forecast that war in Iraq would be “a cakewalk”. Optimists argued that the regime would collapse, no one would fight for Saddam, and American and British forces would be welcomed as liberators. Until recently, the administration did little to dampen down such inflated hopes. The president did not give any warning that war could be longer or bloodier until his speech on “day one” of the war, announcing action had begun.

In the first week, of course, almost none of the optimists' forecasts came true. The regime did not fall, fighting got more intense each day and there were, give or take a reported disturbance in Basra, few signs of American soldiers being greeted as liberators by Iraqis.

To top it off, American reporting of the war followed the same trajectory from exaggerated optimism in the first three days to exaggerated pessimism in the next four. Television reporters described the 50 soldiers killed, missing or captured in the first week as “heavy casualties” (a term justified only if you measure it against the first 100 hours of ground fighting in the first Gulf war). Reporters peppered Donald Rumsfeld and his generals with variants of the question: “Why is it all going wrong?” The *New York Times* encapsulated the view thus: “day two—moving forward; day three—early success; day five—setbacks; day six—resistance, loss; day seven—bogged down”.

The supposed difficulties on the battlefield have had some impact domestically. A daily poll by the Pew Research Centre found a precipitous fall in the number of Americans who said they thought the war was going very well during the week. It was above 70% on days three and four (“early success” in the *New York Times* definition). By day six (“resistance, loss”) the proportion was just 38%.

Despite these wobbles, the American public seems remarkably sanguine. The polls show that the public accepts that the war will be longer and bloodier than expected, and that they support it anyway. Most surveys show a rise in the proportion of Americans who think the troops will sustain significant casualties (up from about a third to a half); a similar rise in the number of those who think the war will go on for months; and, despite this, no change in the large majority of those who say they support the war (a figure that is usually close to 70%).

In other words, Americans are adjusting to the prospect of a conflict that could be messier, bloodier and slower than the administration first hinted at. Why are they so sanguine?

The first reason is that the military situation hardly merits panic. The current setbacks might have had a bigger impact on the public had there been any military or political sign that the campaign was, in fact, bogged down. There was not. The administration has been able to make a plausible case that the armed forces are making progress. The arrival within 50 miles of Baghdad in less than a week is, by most measures, a success.

More importantly, Mr Bush's team is now supported on the nation's television screens by seasoned generals, rather than ideological armchair hawks. While various political types had talked about a short war, the generals have always been more realistic. Some Washington hawks thought a mere 30,000 troops would be enough (because arming the Iraqi opposition would be enough). The Pentagon mercifully ignored them and sent roughly ten times that amount; indeed the debate this week turned to whether that was too few.

The administration's message—both in words and deeds—is also now more sombre. When the White House this week presented its spending request to Congress to finance the war, asking for $75 billion over the next six months, it made it clear that it was planning for a long conflict. Of the total, $53 billion is to deploy and maintain troops in Iraq—enough to keep the full force in place for five months.

Not going all his way

Yet the White House is not managing everything to its satisfaction. On day seven, the Senate voted to halve President Bush's tax cut, passing an amendment reducing it from a proposed $726 billion to $350 billion. Several moderate Republicans, worried about the cost of the war (and reconstructing Iraq), voted with the Democrats. This does not necessarily mean the tax cut will be halved: Senate Republicans are vowing to put some of the cuts back, and a final bill has to be agreed with the House of Representatives, which passed the full tax cut. Still, this was a domestic defeat for the president and suggests that, politically, he will not be able to have both a war, and his whole tax cut.

The nature of America's support for the war may also pose a dilemma for Mr Bush. Americans seem to be sticking to their victory-at-all-costs tradition. At present, there is no conflict between that and the limited campaign the allies are trying to fight. But should things worsen, Americans might demand that their generals use the sort of overwhelming force they are now trying to avoid.

This might seem far-fetched but it is not. Mr Hussein may well try to lure America into a battle of Baghdad in the belief that heavy casualties will persuade Mr Bush to sue for a settlement. In 1990, Saddam told the last American ambassador to Baghdad, April Glaspie, “your country has neither the political will, nor the tenacity, to sustain 10,000 deaths in the desert.” That looks like a miscalculation. If Baghdad does indeed turn into a bloodbath, Americans are just as likely to turn against the limited strategy—demanding heavy bombing and more lethal force—as they are to turn against the war itself.

The domestic problem for Mr Bush may not be waning support for war, but public insistence on the sort of all-out victory that might alienate world opinion.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

The televisual war

A step forward

Mar 27th 2003 | WASHINGTON, DC
From The Economist print edition

Americans are seeing war in a new way

AP

Through a glass, darkly

NIGHT-OWLS who stayed up watching CNN into the early hours of Monday morning, March 24th, saw something unprecedented: a televised battle, broadcast as it happened, without censorship or interruption. It was, like all battles, compelling and chaotic. The camera peered along the soldiers' gun sights. It lurched wildly as troops and cameraman dived for cover. It showed that the war in Iraq really is the first televised war.

That claim was made about the first Gulf war, too. But the coverage, argues Stephen Hess of the Brookings Institution, was different. The memorable footage from 1991—smart bombs disappearing down chimneys—came from the Pentagon. Armchair generals relied on briefings.

This time, more than 500 journalists are “embedded”—that is, living with the troops, filming and reporting the grunt's eye view. Nearly 1,500 more journalists are covering the war independently. This changes the balance between reporters and the armed forces: newsmen now have information of their own. Correspondents ride around in tanks or scurry into bunkers at a chemical-weapons' alert. One stuck a microphone under the nose of a soldier who had just been injured in combat. The US Army received a videotape of a helicopter crash from a correspondent.

That does not mean the Pentagon's control over coverage has disappeared. Press watchers worry that reporters, who depend on the soldiers and sailors around them for their lives, will bond too closely with their unit to remain impartial. The Pentagon's communication staff swears it will not stop anyone broadcasting material that might embarrass the generals—though this promise is yet to be tested.

Instead, the real problems result from the Pentagon's basic decision to allow wider access. In the first Gulf war, everyone depended on the Pentagon, whose information sometimes turned out to be wrong (remember claims that Patriot missiles had “near-perfect” accuracy?). A big reason why the Pentagon changed its policy was that this damaged its credibility.

Now, the problem is that so many journalists are broadcasting snippets from the front, it is hard to get a broad, accurate reading of what is happening. The Pentagon had hoped the process of embedding would educate correspondents in the realities of war and reduce their tendency to obsess about disasters. So far, the results have been mixed.

The American networks and cable companies have refused to broadcast gruesome pictures of dead Americans and American prisoners-of-war. On the other hand, the first days of conflict—when American tanks raced through an empty desert—were described as a triumph. The next few were described in overly pessimistic terms as reporters focused on the personal tragedies of American casualties.

The presence of embedded reporters is having another more worrying result: Americans are watching a different war from everyone else. More than three-quarters of embedded correspondents are American. The networks and cable channels rely on them, so Americans see even more of their troops than usual.

Non-American broadcasters rely more on independent crews, and spend more time reporting on the Iraqis. They thus see more casualties than American viewers do. To get a feel for that, Americans have to log on to internet sites. For instance, one website in Baghdad says: “The images al-Jazeera is

broadcasting are beyond any description. What was most disturbing are the images from the hospitals. People were lying on the floor with bandages and blood all over. If this is what ‘urban warfare' is going to look like, we're in for disaster.”

On balance, reporting of the war in America has benefited from the unprecedented access. It is likely the Pentagon will benefit, too. But the generals opened up Operation Iraqi Freedom to scrutiny in order to win over hearts and minds in Iraq as well as in America. That laudable aim is probably not yet being achieved.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Arab-Americans

Under suspicion

Mar 27th 2003 | CHICAGO
From The Economist print edition

Worried about a country to which they fled as a safe haven

AS AMERICAN soldiers fan out across the Iraqi desert, government troops of another sort are fanning out across America. Under Operation Liberty Shield, FBI agents have conducted about 5,200 “voluntary” interviews with Iraqi-born people over the past two weeks. Another 6,000 chats are planned with Iraqi-Americans in their homes and workplaces. So far nobody has declined.

AP

Dearborn prays for understanding

Iraqis in America seem to have a schizophrenic approach to the war. Few support Saddam Hussein; plenty, including the Shia Muslims who fled after the 1991 war, have suffered at his hands. Yet most seem to oppose what they see as an unnecessary invasion. They worry about their families, and they see a double standard in America's treatment of Iraq and Israel, which has also ignored some United Nations resolutions.

In the Detroit suburb of Dearborn, which contains America's largest Iraqi community, “most people are ducking for cover,” says Ismael Ahmed, the executive director of ACCESS, a local social-services agency. Business is off at the restaurants along Warren Avenue.

Mixed feelings capture the mood of many other Arab-Americans. A general sense of helplessness is about the only thing that brings together such a heterogeneous group. The 2000 census lists 1.3m Arab-Americans (roughly double the number in 1980), although some estimates put the number three times that high. About 70% of them are Christian, though the more recent immigrants are Muslims.

Are they right to be worried? Reports of possible hate crimes, such as a recent explosion in front of a Palestinian home in Chicago, have been seized upon. But there is no evidence of any national increase in such attacks since the war began. After September 11th, George Bush condemned any attacks on Arab-Americans.

Now, however, the talk is less of Mr Bush's words than his attorney-general's actions. Since John Ashcroft's USA Patriot Act was passed in October 2001, there has been a spate of arrests, deportations and interviews in Dearborn. Arab-Americans are now worried about a draft version of “Patriot II”, which, they say, would permit secret arrests, secret evidence in trials and other things that many of them once fled.

As for Operation Liberty Shield, which is supervised by the new Homeland Security Department, some Arab-Americans seem to accept interviews with Iraqis as justifiable in a time of war. They are more worried about the power Liberty Shield gives the government to detain for up to six months asylum-seekers from countries “where al-Qaeda, al-Qaeda sympathisers, and other terrorist groups are known to have operated”. The government has not said which countries are covered, but the Lawyers Committee for Human Rights reckons the policy applies to 33 countries, including not only Iraq and Iran but also Thailand and Bangladesh.

More encouragingly, other parts of the government are trying to woo Arab-Americans. The State Department has recruited Iraqis for a “Future of Iraq Project” to help plan the rebuilding of their homeland. The Pentagon has recruited thousands of Iraqi exiles to work as interpreters and prison guards. A steady stream of senior officials from both the State Department and the Pentagon, including Paul Wolfowitz, have visited Michigan to meet exiles there.

But for the moment the mood is bleak—even when it comes to entertainment. “I'm one of 12 Arab comedians in America,” deadpans Ray Hanania, a stand-up comic. “But all the others are in jail.”

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Sodomy laws and the Supreme Court

The end is nigh

Mar 27th 2003
From The Economist print edition

How the zeal of Texan policemen may change discrimination laws forever

HOUSTON's police were taking no chances. A panicky neighbour had just called to say that a man with a gun was “going crazy” in John Lawrence's apartment. But when police burst in they found, not a crazed gunman, but Mr Lawrence and his friend Tyron Garner having sex. Relieved and no doubt red-faced, the cops might have slipped away. Instead, they arrested the two men under Texas's rarely-enforced Homosexual Conduct Law and held them overnight in jail. A judge later fined them $200 each.

AP

Garner and Lawrence may change the law

More than four years later, this sorry little incident has become one of the most important anti-discrimination cases to be brought to the Supreme Court for decades. In a hearing before the court this week, the state of Texas defended its law against a powerful challenge from lawyers for the Lambda Legal Defence and Education Fund, a gay-rights group which has taken up Mr Lawrence's and Mr Garner's case. The outcome will decide the fate of similar laws in 12 other states, but will also have wider effects. If the court rules broadly against the law, it could establish a basis to challenge bans on same-sex marriage (which exist everywhere except Vermont), and to make illegal most other kinds of discrimination against gays.

The case, which has rallied America's gays and gathered predictable support from various civil-liberties groups, has posed a dilemma for political conservatives. Gay-rights campaigners have found some strange allies among leading libertarian groups, such as the Cato Institute and the Institute for Justice, which have filed briefs supporting Mr Lawrence's and Mr Garner's challenge to the Texas law, arguing that the government has no business meddling in the bedroom.

Opposing them have been the American Centre for Law and Justice, a group founded by preacher-politician Pat Robertson, as well as the Family Research Council and other socially conservative groups. They maintain that the Texas law is a reasonable means of promoting and protecting the institution of marriage. Given this split in conservative ranks, it is hardly surprising that the Bush administration has decided to stay out of the case.

Mr Lawrence's and Mr Garner's lawyers argue that Texas's law violates the constitution in two ways: by breaching their rights to liberty and privacy, and by denying them the equal protection of the law, both guaranteed by different provisions of the Fourteenth Amendment. They go on to ask the court to overturn a controversial 1986 decision by the court, *Bowers v Hardwick*, which upheld a Georgia sodomy

law which Georgia's own Supreme Court has since overturned.

Texas's lawyers counter that the law's aim is to uphold “the long-standing moral traditions of the state against homosexual conduct”, and that this should override the two men's privacy interests. Moreover, the state goes on to argue that the law does not discriminate on the basis of gender—which would almost certainly lead the court to overturn it—because it applies equally to men and women.

Many observers believe that Mr Lawrence and Mr Garner have a good chance of winning the case. But much depends on what reasons the justices give. The most obvious route for them to take is to overturn the law on privacy grounds. A long string of Supreme Court privacy precedents could easily support such a ruling, which would also overturn sodomy laws in other states.

Such a decision would be an important symbolic victory for gay activists, but it would not change the lives of most gay people, because these laws, however noxious in theory, are rarely enforced. But the peculiar nature of the Texas law gives the court an opportunity for a far more sweeping judgment. The law is one of only four in the nation which specifically criminalise homosexual sodomy, rather than so-called “deviant” behaviour between heterosexuals as well. If Mr Lawrence had been engaged in the same sex act with a woman, in other words, he could not have been charged with a crime.

If the court rules that this feature of the Texas law means the two men's rights to “equal protection” have been violated, *Lawrence v Texas* could turn out to be a landmark decision, as important for homosexuals as *Brown v Board of Education*, the 1954 decision which outlawed racial segregation in state schools, was for blacks. Such a ruling in this case would in effect equate discrimination on the ground of sexual orientation with sexual and racial discrimination. By this standard, bans or restrictions on gay marriage, adoption, employment and service in the armed forces would be likely to topple—all thanks to the Houston police's over-zealousness four years ago.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Boston's new bridge

Can't call it that

Mar 27th 2003 | BOSTON
From The Economist print edition

The name's longer than the bridge

AP

Looks good, sounds divided

IN A city that clings to old ballparks and old brick, Boston's new bridge, which opens for traffic this weekend, seizes the eye. Its criss-crossed cables make one think of a sailing ship's masts. And its near-completion is proof that the Big Dig, the city's decade-old road-construction project, will some day, please heaven, draw to a close.

It took years for people to say anything nice about the Big Dig, a $14.6 billion slog that has plagued Bostonians with traffic jams and cost over-runs. But stodgy Boston has heaped uncharacteristic love on this northernmost piece of the project, which spans a fairly narrow bit of the Charles River. Last May tens of thousands of people stood for hours in the rain for a chance to walk from one end of the bridge to the other.

The only controversial thing about it is its name: the Leonard P. Zakim Bunker Hill Bridge. The argument began in 1999, the year of the death of Leonard Zakim, the leader of the local Jews' Anti-Defamation League. The state's governor declared that Zakim, who had built bridges among races and religions, deserved a real bridge in his name. But the idea went over poorly in Charlestown, a working-class Irish area next door, where people complained that they had been promised a tribute to their neighbourhood and to the Revolutionary War battle of Bunker Hill, which took place there. A Jewish name was wrong for the bridge, it was said, since no Jews had fought at Bunker Hill (in fact, one did).

It took a month of wrangling before the politicians compromised on the unwieldy double name. But few people intend to spend nine syllables on a bridge, so the fight for nicknames has been fierce. There are T-shirts touting the “Bunker Hill Bridge”. “ZBH” is another effort. Radio traffic reporters, who often have the last word in these matters, have started calling it “the Zakim”.

Boston may soon be having another name quarrel, this one over the Big Dig's main feature, the soon-to-be-opened tunnel under the city. Some people assumed it would be called after “Tip” O'Neill, a Democrat who was speaker of the House of Representatives in Washington, and raised much of the money for the project. But the new Republican governor, Mitt Romney, wants to call it the Liberty Tunnel. The critics grouse that, though the name may fit the current wartime spirit, it doesn't feel really Bostonian. Our suggestion: “The Tip”.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Lexington

The not-so-quiet American

Mar 27th 2003
From The Economist print edition

Tactful or not, Donald Rumsfeld is the face of America at war

DONALD RUMSFELD is the most important secretary of defence since Robert McNamara in the Vietnam era: a 70-year-old veteran-cum-visionary charged with reorienting America's military machine from containing communism to fighting terrorism. He already has one war in Afghanistan under his belt. Now he has committed American troops to a war in Iraq that could keep them engaged in the region for years. If all roads in Iraq lead to Baghdad, all roads in Washington now lead to the Pentagon.

It was not always so. Before the terrorist attacks on the twin towers and the Pentagon, Mr Rumsfeld looked like an extinct volcano. On September 7th 2001 the *Washington Post* ran an article speculating on possible successors. But from the moment he raced out of his office to tend to the wounded he was transformed into a national hero. His straight talk and steely confidence proved to be just the tonic the country needed. His press conferences became compulsory viewing. A man who has seen only two films in years—"Saving Private Ryan" and "Black Hawk Down"—found himself treated as a matinée idol.

The articulator-in-chief has been just as active in shaping long-term strategy. From the first he pushed for an all-out war on terrorism rather than just a surgical strike on al-Qaeda. He had been pointing for years to the dangers that could come from explosive dictatorships such as Iraq and from the spread of weapons of mass destruction. September 11th confirmed his Hobbesian view of the world.

Why has Mr Rumsfeld proved so successful in rallying Washington behind his vision? It is tempting to argue that he owes it all to Jacques Chirac. French intransigence helped to confirm George Bush's worst suspicions about the United Nations. Even now, the *entente discordiale* continues: if anybody is doing more than Rummy to keep the UN out of rebuilding Iraq, it is Jacques. But most of it comes down to Mr Rumsfeld himself.

Begin with his talents, which include an extraordinary combativeness (he was once the All-Navy Wrestling Champion) and a wealth of experience. Elected to Congress in 1962, he was ambassador to NATO under Richard Nixon, and then chief of staff and defence secretary under Gerald Ford, and has held grand-sounding jobs ever since (including meeting Saddam Hussein as Ronald Reagan's special envoy to the Middle East). He is both the youngest and oldest secretary of defence in American history. Henry Kissinger—no mean draftsman in the darker arts of politics—described the young Rumsfeld as "a skilled full-time politician-bureaucrat in whom ambition, ability and substance fuse seamlessly." An operator, in

other words.

But the deeper reason for Mr Rumsfeld's influence in the White House is ideological. He is “one of us” in a way that Colin Powell could never be. Mr Rumsfeld is one of the most conservative members of a conservative club. His congressional voting record received a 100% rating from conservatives and a 4% rating from liberals. He is also a CEO in a club of CEOs. As chief executive of G.D. Searle in the early 1980s, he quintupled the drug company's share price by pioneering techniques that other Bush cabinet members were promptly happy to copy: downsizing, delayering and selling off non-core businesses. Mr Rumsfeld is particularly close to his fellow ex-CEO and one-time protégé, Dick Cheney, who succeeded him as President Ford's chief of staff.

Sun king or Sun Tzu?

No one can doubt Mr Rumsfeld's success in amassing power. But how successfully has he wielded it? The accusations against him have been launched in two waves. The longstanding barrage—mainly dispatched from doveish quarters—is that he has wilfully antagonised allies and sabotaged diplomacy. The fresher assault, which comes from generals as much as politicians, is that he has underestimated the difficulty of removing Saddam Hussein. Mr Rumsfeld, they whisper, is a classic victim of “sun-king syndrome”—a near universal malady among bosses of all sorts that leads them to overestimate their own abilities and underestimate everybody else's.

The diplomatic charge is, to put it politely, hard to rebut. Mr Rumsfeld may be right that America's policies should dictate its coalitions rather than the other way round, but his fondness for throwing rhetorical hand grenades such as that crack about “old Europe”, accurate though history may find it, has hardly helped the collecting of allies. His forthright style has reinforced latent fears of American imperialism, maybe to the cost of his troops now. The current war would have been easier if Turkey had given America permission to use its ground bases.

What about Rummy the war leader? His relationship with the armed forces may be better characterised as “creative tension” than sun-king arrogance. In Afghanistan he was largely right to push Tommy Franks to make bolder use of air power and special forces (though more ground troops might have made it easier to capture al-Qaeda's leaders). In Iraq the jury is still out, but the argument between Mr Rumsfeld and the generals may well have produced a sensible compromise. Mr Rumsfeld eventually accepted the generals' assessment that a war on Saddam needed 250,000 troops in the region; General Franks agreed to a much bolder attack than he had originally intended.

Mr Rumsfeld likes management maxims. One of “Rumsfeld's rules” is: “Don't divide the world into ‘them' and ‘us'.” He has clearly failed on that. Another is: “Visit with your predecessors from previous administrations. Try to make original mistakes, rather than needlessly repeating theirs.” Which leads us back to Mr McNamara, another ex-CEO with a boundless ego and a taste for slicked-back hair, rimless glasses and high-tech warfare. Whether Mr Rumsfeld is breaking yet another of his rules, and needlessly repeating Mr McNamara's mistakes in Vietnam all those years ago, we shall soon discover.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Mexico's political system

Redrawing the federal map

Mar 27th 2003 | MEXICO CITY
From The Economist print edition

Long a fiction, Mexican federalism has become a political reality, but not yet a fiscal one. That carries dangers

Get article background

MEXICAN pedants like to point out that their country's correct name is the *Estados Unidos Mexicanos*—with the stress firmly on the first two words. But the official claim that the country is a union of federal states was long mendacious. Rather, for most of the seven decades of rule by the Institutional Revolutionary Party (PRI), Mexico was a highly centralised one-party polity. State governors, and even many mayors, were named by the president and answered to him, even if they were duly elected, by fraud if need be.

In a modernising country of 100m, this became impossible to sustain, especially as Mexico evolved into a multi-party democracy (see map). Vicente Fox, whose victory in Mexico's presidential election of 2000 finally ended one-party rule, is pledged to devolve power. One of the founding principles of his conservative National Action Party (PAN) was the defence of local autonomy. Back in 1989, it made the first serious dent in the PRI's monopoly of power when it won the governorship of the border state of Baja California Norte; the new governor promptly challenged the fiscal settlements handed down to him from the presidency. Mr Fox himself was later a successful governor of Guanajuato state. Carlos Medina Plascencia, a PAN senator, argues that Mexico's 2,470 municipalities should govern themselves with “the minimum necessary interference from the federal government”.

Federalism is more widely in fashion in Mexico. Ernesto Zedillo, Mr Fox's predecessor, devolved management of education to the states (though the centre still controls the education budget). The main parties each try to outdo the others in their enthusiasm for local democracy. But as with so many other policies, Mr Fox is finding it hard to turn rhetorical support for federalism into real change. Ironically, that

is because his own power is curbed by the opposition's control of Congress.

Power may be dispersed, but money is not. About 80% of federal revenues are appropriated by the centre; most of the rest falls to the states, though 5% is spent by the municipalities. In Brazil, by contrast, the federal government controls only around half of total government revenues.

Under Mexico's law of “fiscal co-ordination”, the states' powers to raise local revenues are restricted. They consist chiefly of fairly small taxes on payrolls and on cars; municipalities must rely on symbolic property taxes. At one extreme, the Federal District, the quasi-state which includes much of Mexico City, raises about 45% of its $8 billion budget itself. Most states are at the other extreme—lucky if they gather 10% of their spending.

For the other 90%, they must rely on federal transfers, divided up under a notoriously complicated formula dating from 1980. Each state's slice of the pie is fixed by its past share, its population and its local tax revenues, though several poor states, such as Chiapas, get a bit extra.

Many states have a vested interest in blocking change. They fear that they would be losers under any devolution of tax-raising powers. The exceptions are the richer, faster-growing states of parts of the north (many governed by the PAN).

Predictably, rather than seek new revenue-raising powers, the governors are pressing for a bigger chunk of federal funds. To do so, Ricardo Monreal, the young governor of Zacatecas, in 1999 set up an umbrella group of governors from his leftish Party of the Democratic Revolution (PRD). Last year, this evolved into a powerful all-party lobby group called the National Conference of Governors (Conago). Not coincidentally, since 1999 the governors have extracted a slowly rising share of the national budget, though it slipped slightly this year. Earlier this month Mr Fox, in a nod to the rising influence of the governors, attended a Conago meeting—“to listen”, he said.

But if federalism is really to mean more in Mexico, the states will have to shoulder more of the financial responsibility for their political ambitions. That requires changing the fiscal co-ordination law. Even optimistic federalists do not expect this to happen soon. So local politicians are looking at other ways to raise money. The Federal District is experimenting with what it calls “off-budget revenues”, such as allowing advertising on bus-stops. Early next month, Tlalnepantla, a PAN-governed municipality encompassing some of the prosperous northern suburbs of Mexico City, plans to issue a $9m municipal bond to finance a water-conservation project. It will be Mexico's first municipal bond not guaranteed by the federal government. Tlalnepantla has turned instead to the International Finance Corporation, the private-finance arm of the World Bank, for a $3m guarantee.

Unless it achieves an overarching new federal pact reassigning responsibilities and revenues, Mexico may lose more than it gains by piecemeal devolution. Mr Fox argues that if states are to get more federal money, they must clean up their administrations and submit to independent audits. In addition, Mexico's hard-won and still recent reputation for fiscal responsibility could be at risk. Already, the governors have been pressing for Congress to exempt transfers to the states from provisions under which the Finance Ministry can automatically trim public spending when oil revenues fall. No wonder officials have mused in public about whether to rename the country just plain Mexico.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com WORLD THE AMERICAS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Crime in Brazil

Gangs v the state

Mar 27th 2003 | SÃO PAULO
From The Economist print edition

The shocking murders of two judges

Get article background

THE most dangerous job in Brazil, it seems, is not chasing criminals but handling those already in prison. Two judges with that responsibility were murdered this month, one in upstate São Paulo, and the other in Espírito Santo, a small coastal state notorious for crime and corruption. Brazil has lethal criminal gangs and a high murder rate. But, until recently, judges had been spared. The murder of two within ten days looks to Brazilians like a declaration of war against the state by organised crime.

If so, the prisons are the front-line. Many have become headquarters for gangs. São Paulo's most notorious criminal gang, the Primeiro Comando da Capital (PCC), was formed by prisoners in response to appalling prison conditions. It now runs several rackets, including drugs and kidnapping. Many of its leaders are in jail, as are bosses of some Rio de Janeiro gangs, the country's most powerful. That does not impede them: prisoners who can afford to bribe their jailers expect such indulgences as cell phones and “intimate visits” from wives and girlfriends.

Both the murdered judges favoured sterner regimes. In São Paulo, Antônio José Machado Dias was responsible for a high-security prison whose austere routine excludes conjugal visits and restricts fraternisation. Fernandinho Beira-Mar, a drug-trafficker whom the authorities hold responsible for recent bomb attacks in Rio, was moved there a fortnight before Judge Dias's murder. But police suspect the judge was killed by the PCC. In Espírito Santo, Alexandre Martins de Castro received death threats after probing the illegal granting of leave to prisoners. He also ordered the transfer of a retired police colonel, allegedly a professional assassin, to a prison in the Amazon state of Acre.

The murder of the judges, some people think, points not to an enfeebled state but to a newly determined one. They are a consequence of “the change of posture of public power in confronting organised crime”, says Alexandre de Moraes, São Paulo's secretary of justice.

But toughness alone will not work. Brazil's law-enforcement apparatus is riddled with defects, from the sloppy way crimes are recorded to the ridiculous workload of the supreme court, which made 83,000 rulings last year. The mobsters have infiltrated the state. In Espírito Santo, several police chiefs and politicians are in the pay of gangs. A former president of the state legislature was arrested in February. Of ten people held in connection with Judge de Castro's murder this week, four were policemen; they were later released.

For years, Congress has been mulling reforms, including giving prosecutors more control over police investigations and restricting jail sentences mainly to those convicted of violent or serious crimes. But Congress dislikes confronting powerful lobbies, such as the police. The new left-leaning government of President Luiz Inácio Lula da Silva seems intent on drafting fresh reforms of its own. Many Brazilians hope that this time reforming intent produces swift action.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Politics in Canada

All about Eves

Mar 27th 2003 | TORONTO
From The Economist print edition

A stunt turns sour on Ontario's premier

Reuters

Would you buy a used budget from him?

IT IS an idea that might tempt many an unpopular finance minister. Instead of exposing the annual budget to the scrutiny of legislators, why not turn it into a happy photo opportunity among friends? That is the brainwave that occurred to Ernie Eves, the Conservative premier of Ontario, Canada's largest province. But it is one that he is likely to rue.

At mid-week, Mr Eves was sticking to his plan to announce the budget on March 27th to a carefully screened audience at the suburban training centre of a car-parts maker, whose owner happens to be a donor to the Conservatives. Mr Eves's handlers spun the idea as an exciting evolution of parliamentary tradition. To many others, it looked like a violation of it.

The Conservatives have ruled Ontario since 1995, but their current term is drawing to a close. Mr Eves is said to be contemplating a spring election, but he has a problem: his party has long trailed behind the Liberals in the opinion polls. This month, Mr Eves announced a surprise recess for the provincial parliament, until April 30th. The purpose? To avoid subjecting his administration, and its budget, to opposition questioning, it seems.

The opposition was predictably outraged. So was the Canadian Taxpayers' Federation, usually a loyal supporter of the Tories. The most damaging criticism was even less expected: Gary Carr, the speaker of Ontario's parliament and a veteran Conservative, said voters “should start to question [Mr Eves's] ability to govern when he makes decisions like this.” Mr Carr has called on the Conservative caucus to vote against the budget when it is sent to the house in late April. But it may never get there: Mr Eves may use its tax cuts and promised extra health spending as a springboard to an election that many expect to be called for mid-May.

Whenever it is held, it will be an uphill battle for the Tories. When finance minister from 1995 to 2001, Mr Eves was at the forefront of the Conservatives' “commonsense revolution”, slashing taxes and spending alike. But the Tories have since lost steam, direction and popularity. As premier, Mr Eves has nudged the government towards the centre. He cancelled a plan to privatise electricity generation, and increased spending on education.

But the voters seem unmoved. The premier's personal image has not helped. He is a dandy, who admits

to spending C$25,000 ($16,900) per year on clothes. His voice has been unkindly compared to that of “a small, angry dog barking at hubcaps”. So Mr Eves badly needs a good-news budget to launch his campaign. But now it is likely to be remembered mainly for where it was held.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Japan

Read all about us

Mar 27th 2003 | TOKYO
From The Economist print edition

Magnum

Triumphalist books about Japan have given way to gloomier tomes

WHEN its economy was booming, cars and electronics were not the only industries in which Japan battled the West. Japanese authors also competed with their *gaijin* counterparts to churn out treatises about Japanese ways of doing things. On one point almost everyone agreed: the Japanese way of organising society was better, as its juggernaut economy proved.

Needless to say, outside Japan, demand for such books is modest at the moment. But what about in Japan? After a decade of economic torpor, how do Japanese writers see their country now? The swagger that marked books such as “The Japan that Can Say No”, in which Akio Morita (Sony's co-founder) and Shintaro Ishihara (a novelist and nationalist politician who is now governor of Tokyo) trumpeted Japan's rise to world prominence just before the bubble popped, has certainly faded. But Naoki Inose, a popular history writer who gained headlines last year serving on a committee for highway reform, says that many Japanese were never as confident as the bestselling titles of the bubble years encouraged them to be.

For all the affluence that Japan achieved in the 1980s, he argues, many Japanese still felt an underlying anxiety, and were never really convinced that their success reflected fundamental strengths in their society. Even as western and Japanese authors were praising the bureaucratic and business structures that Japan had developed over the previous century, Mr Inose argues, ordinary Japanese remained unsure of where those overweening institutions were taking them. Even if anxieties were lurking all along, however, the events of the past decade have driven them to the surface, and Japan's economic weakness has clearly played a role.

A quick glance at the bestseller lists highlights the change in tone. Tohan, which publishes the most prominent list, compiles separate tables for business books and other sorts of non-fiction. In 1989, one of the few economic worries on the minds of Japanese readers was taxes: four of the top ten business books aimed to help them cope with a new consumption tax. Two other popular business books that year took a stab at forecasting the 1990s, and both of their authors were optimistic. “Nihon no Jidai” (Japan's Era), by Keitaro Hasegawa, took the prize with its bold forecasts about how Japan would soon be managing the flow of money, people and goods around the world.

It may be unfair to single out Mr Hasegawa just because his book sold more copies than the dozens of others that made similar extrapolations. “It is considered bad form to ask what most of these guys were writing ten years ago,” says Peter Tasker, a consultant and writer in Tokyo. Still, it is worth comparing Mr Hasegawa's outlook with that of the top-selling business book now. “Tomorrow's Economics”, published

recently by Heizo Takenaka—the economics and banking minister in Junichiro Koizumi's cabinet—also tries to envisage a bright future for Japan; but his optimism hangs on Japan's making a string of tough choices that authors in the bubble years did not predict.

Japan's economy has not been the only source of worry and confusion, however. One of the country's best-known authors, Haruki Murakami, points out that two of the most significant events in Japan during the 1990s were not economic: the Kobe earthquake and the poison gas attacks by the Aum Shinrikyo cult in the Tokyo metro system, both of which took place in 1995. Though one was a natural disaster and the other man-made, Mr Murakami argues, both shook the faith of many Japanese in their society's underpinning.

In “Underground”, which recounts his interviews with the metro attackers and their victims, Mr Murakami tried to examine broadly the cruelty with which Japanese society can treat those who are different. After reading about a victim of the gas attacks who had subsequently been shunned by his fellow workers, Mr Murakami writes, he decided to find out “how Japanese society could perpetrate such a double violence”.

It is hard to say whether this sense of economic and social drift explains the slew of self-help books, several imported, which now line Tohan's non-business list of bestselling non-fiction. In 1989, the list was stocked with home-grown biographies and photograph albums of prominent Japanese, from actresses and divas to Hirohito, who died at the beginning of that year. Such lists can be misleading, however. Books known as *nihonjinron*, a class of pop-anthropology books that revelled in the uniqueness of the Japanese, were cranked out so frequently, and resembled each other so closely, that they rarely topped the charts of bestsellers. But many Japanese could not get enough of them in the 1980s, paying to read again and again about how their long history as island rice-cultivators had set them apart from the rest of humanity.

A decade of gloom has led some Japanese to give this implicit belief a different twist. “We may be cultivators,” a few reformists say, “but it might not be so bad if we acted a little more like hunters.” Although their sense of uniqueness remains, however, the Japanese seem to share at least one trait with readers everywhere: when times are tough, it helps to laugh at someone else. One of the most popular books in Japan now is “Stupid White Men”, by Michael Moore, an American author and film-maker. It dwells on corruption, injustice and electoral shenanigans in the United States.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

South Korea and America

Patching up

Mar 27th 2003
From The Economist print edition

In search of a common strategy

Get article background

EPA

What's in Yoon's pocket?

IT IS not just in Europe, nor indeed just over Iraq, that the United States has trouble with its friends. South Korea's new foreign minister, Yoon Young-kwan, was in Washington this week hoping to hammer out a common strategy for dealing with North Korea's suspected nuclear ambitions. South Korea has been keen for America to start talking directly to prickly North Korea. But the Bush administration says it will do so only as part of a broader multilateral exchange including others in the region affected by North Korea's provocative behaviour. With the North feared to be preparing to restart a plutonium-reprocessing plant, and possibly to test-fire one of its long-range missiles, Mr Yoon's task is urgent. All the more so as South Korea's new president, Roh Moo-hyun, is soon to travel to Washington for his first meeting with George Bush.

Since America caught it cheating last October on a 1994 agreement to freeze its plutonium production, by secretly setting up an illicit uranium-enrichment programme, North Korea has pulled out of the Nuclear Non-Proliferation Treaty and restarted its plutonium-producing reactor. Accusing America of preparing a pre-emptive strike on its nuclear facilities, this week it cancelled economic talks with South Korea. Citing the threat from an American-South Korean military exercise (to which North Korea had been invited to send observers, but refused), it also pulled out of military liaison talks at the demilitarised zone on its border with South Korea.

North Korea says all this is designed to force America to negotiate a non-aggression treaty. But it is also clearly intended to widen the rift that has emerged between America and the new government in Seoul. Both insist that North Korea must give up its nuclear ambitions. Both say they want a peaceful solution to the crisis. But, though Mr Roh has so far ruled out any resort to military force, or even sanctions, to resolve the issue, Mr Bush has not.

It did not help that Mr Roh, a past critic of America's military presence in South Korea, kicked off his presidency by implying that he could somehow mediate between America and North Korea. But his government has since changed its tune. Disappointed by North Korea's belligerent response to offers of better relations in future, and concerned at the effect the crisis is having on South Korea's economy, Mr Yoon now endorses a multilateral approach, albeit one that would involve direct talks between America and North Korea too. Both Japan and China have been pressing the North to accept such a plan.

One idea, a version of which Mr Yoon may have brought to Washington, would be for America to agree to bilateral talks with North Korea under some multilateral umbrella, while South Korea would not just offer North Korea inducements to agree to this formula (the North is adept at pocketing these and giving nothing in return) but would also agree to suspend all economic assistance if the North refused. The aim would be to give both America and North Korea an incentive to talk, while reassuring America that South Korea was ready to work alongside its chief ally, not just carp from the sidelines.

Mr Roh has taken other steps too to bolster the alliance. Hints from American officials that some forces in South Korea could be withdrawn if the government wished had caused alarm, and have prompted strong government expressions of support for the servicemen. Like Japan, which also sees the need to back up its chief ally at a time of growing regional tension, the South Korean cabinet has agreed in principle to

send non-combat troops and other assistance to Iraq after the war.

For their part, American officials insist that North Korea will be handled differently from Iraq. But on this point South Korea needs some reassurance. For, though some of America's diplomats see multilateral diplomacy as a way to more productive bilateral talks with North Korea, others see it as a way of gathering support to pile on the pressure. The worse the North behaves, the more likely it is that the hardliners will win the day.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Drugs in Central Asia

Deadly traffic

Mar 27th 2003 | DUSHANBE
From The Economist print edition

Opium and heroin plague the region

Get article background

VICTORIA was 18 when she started injecting heroin. Now 22, she claims to have been clean for the past six months. She works as a volunteer for RAN, an NGO based in Dushanbe, the capital of Tajikistan, which provides counselling—and clean syringes—to some of the city's growing number of drug-takers. With neighbouring Afghanistan once again a major grower of opium, and demand for heroin still strong on the streets of Europe, Tajikistan and its neighbours are getting caught in the middle.

Central Asia has become a major route for Afghan opium and heroin travelling to Europe. As Pakistan and Iran have cracked down on drug trafficking from Afghanistan, the flow has moved north. According to the United Nations Office on Drugs and Crime, the trade of opium through Central Asia started to develop in the early 1990s, and heroin first appeared in 1995. Today the UN estimates that about one kilo in four of heroin coming out of Afghanistan goes through Central Asia. In 2002, drug-trafficking of Afghan opiates generated $2.2 billion in Central Asia—equivalent to 7% of the area's GDP.

With 1,400km (875 miles) of porous borders with Afghanistan, Tajikistan is affected far more than any other Central Asian country. In 1996, the country's authorities seized 6.5kg of heroin. Last year, they intercepted close to four tonnes, almost 80% of the total seized in the region. As much as 80 tonnes of heroin may have passed through the country. The value of heroin transiting has gone up by three to four times in 2002, reflecting an improvement in purity. In 2001, the quality of heroin was so poor that unhappy Russian buyers returned some to Afghanistan. Less opium, on the other hand, seems to have been exported since 2000; it is increasingly being processed into heroin inside Afghanistan before being shipped out.

As traffickers handle increasingly valuable loads, they are hedging their bets by organising more, but smaller, shipments. Operations are also becoming more sophisticated, and traffickers better organised—and better armed. But so are Tajikistan's authorities, in spite of persistent suspicions of corruption and high-level involvement in the drug trade. Border guards now have test kits, sophisticated communication equipment and four-wheel-drive cars, nowhere evident a few years ago. A drug-control agency reports directly to Tajikistan's president. Last year the leadership of the border guards was changed. And the fight against the growing drug plague is one of the few things on which Central Asian countries have brought themselves to co-operate.

Since most local traffickers are paid in kind, the heroin trade leaves a trail of addicts in the transit countries of Central Asia. According to the UN, heroin addiction in Central Asia has been the fastest-growing in the world since the late 1990s, and the region now has more than 300,000 opiate-takers, including children as young as ten.

According to RAN, $5-8 will buy you a gram of heroin on the streets of Dushanbe today, and with purer heroin now available the number of overdoses has shot up. Although reliable statistics are hard to come by, Murtazokul Khidirov, RAN's director, compares the spread of HIV due to dirty needles to an “uncontrollable forest fire”. So the NGO supplies up to 3,000 clean syringes a day to 1,000 or so people in Dushanbe, a drop in the ever-deeper ocean of the city's estimated 20,000 heroin junkies, each of whom would need about five needles a day.

Unfortunately, little help is available for those who want to escape drugs. Victoria went in and out of rehab three times. She was locked up and offered sleeping pills as the sole treatment. RAN can offer little more than counselling and moral support to those who want to break their habit. Drug-takers are regarded as criminals, and even RAN's volunteers—former or current addicts—are occasionally arrested and beaten up by the police when they go out to distribute syringes.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Kashmir

A bloody reminder

Mar 27th 2003 | DELHI
From The Economist print edition

A new series of attacks bode ill for peace in Kashmir

IN THE middle of the night of March 24th, a group of hooded men fought their way into the village of Nadimarg, about 65 kilometres (40 miles) from Kashmir's summer capital, Srinagar. The villagers were lined up and shot. The 24 dead included 11 women and two small children. It was the worst such atrocity since a new provincial government took office after an election last September. Two days later, a bomb in a fuel tanker in Jammu, the winter capital, killed one person, and confirmed that the terrorist season is beginning early this year.

Led by Mufti Mohammad Sayeed, the new government has promised a radically different approach to the 14-year insurgency that has racked the Muslim-majority state, killing tens of thousands of people. Dialogue would replace repression, and “a healing touch” would ease the pain of India's formerly heavy-handed security policies. These are still early days. But there are some signs that the first, symbolic gestures, such as the release of separatist militants and the disbandment of a hated special-forces unit, are popular.

The last thing Kashmir's separatists want is a popular government; moderation is their enemy. That, presumably, explains the latest murders: the urge to provoke it into behaving like a colonial oppressor. So, on March 23rd, a moderate separatist leader, Abdul Majid Dar, who had been calling for dialogue with India, was assassinated.

The subsequent killings may have had another aim as well. The victims were all Hindus, from the minority in the Kashmir valley known as “pandits”. The separatists have an interest both in increasing communal tensions and in enlarging Kashmir's Muslim majority. Sure enough, after the killings, more pandits said they wanted to leave.

India, as always, saw Pakistan's hand in the violence. Pakistan, as always, denied it, and condemned the killing. But India insists that Pakistan, which claims Kashmir as its own, encourages the militants, believing they represent the one lever it has to persuade India to engage in talks over Kashmir. India is now pondering how to retaliate for the terrorist attacks. In a reminder of how high the stakes might be, both nuclear powers on March 26th announced their latest tests of short-range, nuclear-capable, surface-to-surface missiles.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com WORLD ASIA

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Education in China

A private matter

Mar 27th 2003 | BEIJING
From The Economist print edition

China's princelings are going abroad for their schooling

GROWING wealth, not all of it legitimately acquired, is rapidly increasing the demand in China for expensive education abroad. A decade or more ago, Chinese studying abroad were mainly on government scholarships. Then, as incomes rose and emigration barriers were lowered, self-sponsored undergraduates led the charge out of the country. Now rich parents have developed a taste for sending their children to foreign boarding schools. But is there more to this latest trend than just the pursuit of learning?

A complete secondary-school education is far more expensive for a foreign student than a year or two on a graduate course or even three or four years doing an undergraduate degree. Yet demand is soaring. Take Britain, where boarding-school fees for an overseas pupil are on average around £16,000 ($25,000) a year—about ten times the average annual income of an urban Chinese household. Students from mainland China are now the second-biggest category of new entrants to British private schools from abroad, behind Hong Kong and just ahead of Germany. Many more go to schools in Australia, New Zealand and Canada, where fees are somewhat lower. About 7,000 a year enter Australia for study at secondary level, half of all those who enter on student visas. The number is growing by 10% a year.

It is not only expensive but also emotionally difficult to send a child to a distant country to study in a foreign language. The government allows urban families to have only one child, and that child is usually the object of lavish attention. But China's university entrance exams are intensely competitive. A secondary-school education abroad is seen as a good way of preparing a child for university (whether at home or abroad) with a bit less pressure. “A big wave is coming” of secondary-school education abroad, predicts Xu Xiaoping, vice-president of New Oriental, a private school in Beijing which trains those wanting to hone their English-language skills in preparation for study abroad.

There is no doubt that a university education is highly prized in China. Mr Xu says he has met many people who have sold their homes in order to be able to send their children to college. But the costs involved in sending a child to secondary school abroad are even higher, and unlike university students, who are able to cover some of their expenses by doing odd jobs, secondary-school students are usually entirely dependent on their parents.

Those sending their children to foreign boarding schools are therefore exceptionally rich. “The spending habits of some of these children are quite astonishing,” says a Chinese businessman who also helps to run an English-language training school (a big growth industry in China). He says a Chinese boarder in Coventry told him he had spent 600,000 yuan ($72,300) in one year. “Some of them eat in expensive restaurants and buy cars like Jaguars and Range Rovers,” he says. Where is this money coming from?

Curiously, the north-eastern province of Liaoning—a region of soaring unemployment often referred to as China's rustbelt—is a leading exporter of boarders. Last September, a Liaoning newspaper said that some 600 high-school students from the region were going abroad to study every year. The number, it said, was increasing rapidly. The website of China's Communist Party newspaper, the *People's Daily*, acknowledged last year that some officials and managers of state-owned enterprises were sending their children abroad and then using their offspring's bank accounts to launder their corrupt gains (Chinese are not usually allowed to set up accounts abroad). It said the parents of some Chinese secondary students abroad were mid-level officials from backward parts of the country, including even from rural townships. According to another official publication, some officials hope to use their children's accounts to buy property abroad to which to retire or flee. The good of their young, it seems, is not always at the top of the agenda of China's nouveaux riches.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Bangladesh's poisoned water

The tainted source

Mar 27th 2003 | CHITTAGONG
From The Economist print edition

Is anyone to blame?

WATER drawn from wells sunk in Bangladesh was for years regarded as of drinkable quality, being free of the bacteria that contaminate much surface water. But, unbeknown to its users, the water turned out to be contaminated with naturally-occurring arsenic. According to the World Health Organisation, the contaminated water may have affected as many as 80m people in the country's population of 140m. Many are already developing arsenic sickness, which, if left untreated, eventually causes serious damage to the lungs, liver and kidneys.

Who is to blame for not spotting the arsenic before it could cause damage? In a preliminary hearing in London's High Court that started on March 25th, lawyers representing two Bangladeshis, Binod Sutradhar and Lucky Begum, both of whom suffer from arsenic poisoning caused by drinking water from wells, argued that the British Geological Survey (BGS) was negligent in not testing for the presence of arsenic while carrying out research in central and north-eastern Bangladesh in 1992. As a result, it was claimed, people gained the impression that the water was safe to drink.

In its defence, the BGS argued that it had no duty to test for arsenic as the research was carried out as part of a small irrigation project that had nothing to do with drinking water. A spokeswoman for the BGSsaid before the hearing that the final report submitted to the Bangladeshi authorities did not comment on whether the water was safe to drink and did not carry out any assessment on the levels of arsenic, because that was not part of its remit.

While the two sides battle it out in court, millions of people in Bangladesh face a terrible choice: whether to drink well water or the dirty surface water. Some aid agencies say the authorities should concentrate on cleaning up the surface water, which causes diarrhoea, said to kill roughly 20,000 people a year in Bangladesh. So far there are about 13,000 proven cases of arsenic poisoning in the country, but the disease often takes ten years for the symptoms to develop. Further legal action by thousands of other poisoned Bangladeshis may follow, depending on the result of the London hearing.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Congo's wars

Peace, they say, but the killing goes on

Mar 27th 2003 | BUNIA
From The Economist print edition

EPA

Against a vile background of slaughter, Congo is supposed to be getting a new unified government

Get article background

BESIDE the cooling ashes of his home, Ruhigwa Likoka spades earth on to the lacerated bodies of his four small children. The pale green hillside where Mr Likoka lives is deserted. His neighbours have fled the tempest of tribal killing that has raged through Ituri, a province in north-eastern Congo, in recent months. As he buries his family to the whistle of birdsong, Mr Likoka has no idea that Congo's civil war was supposed to have ended this month.

Congo's war is horrible and complex. To simplify: this enormous and never stable country fragmented in 1998, when Rwanda and Uganda invaded to topple the Congolese government. Zimbabwe, Angola and Namibia sent troops who saved the regime, but left the invaders in control of much of the country. All parties then proceeded to loot Congo's minerals, as innumerable local militias slaughtered and pillaged. Rwanda and Uganda, once allies, fell out and fought on Congolese soil. Their conflict did not last long, but the two countries remain bitterly at odds. In all, perhaps 3.5m people have died as a result of the war, mostly of disease or starvation.

Lengthy peace talks culminated in pacts between Congo, Rwanda and Uganda, and a power-sharing deal with their leading rebel proxies. A new “transitional” government was to have been formed this month, giving Congo its first unified administration in almost five years, and eventually leading to elections. But it has been postponed until next month, and the violence in Ituri may derail the whole process.

Uganda had promised to withdraw its last 1,000 troops from Congo by March 20th. But on March 6th it reoccupied Bunia, Ituri's capital, and a dozen airstrips and villages nearby. To justify its actions, the Ugandan government cited an attack by a vicious bunch of rebels, the Union of Congolese Patriots (UPC), one of several anti-Ugandan factions in Ituri it accuses Rwanda of arming.

Rwanda, which officially withdrew from Congo in October, is now threatening to reinvade. According to the International Crisis Group, a think-tank, around 5,000 Rwandan soldiers never left, having been seconded to its main rebel proxy, the Rally for Congolese Democracy (RCD). These rebels, apparently

reinforced by more Rwandan regulars, are now moving north towards Ituri. Rumours abound that Rwanda and Uganda will soon come to blows again—or that Rwanda will launch a new offensive against its Congolese enemies, thus reactivating the war. No one is sure. Britain, which gives slabs of aid to both Rwanda and Uganda, is trying to calm matters.

Meanwhile, in Ituri, the war has made old tribal squabbles much bloodier. The province's two main tribes, the cattle-herding Hema and the seed-sowing Lendus, used to bicker intermittently. Now they howl for each other's extinction. A decade ago, Uganda selected the Hemas for its business partners in mineral-rich Ituri. Since the war began, it has armed several Hema militia groups. Last year, it created the UPC, which is Hema-based, only to see it switch its allegiance to Rwanda.

Uganda then befriended a resentful rabble of Lendu militias. These leopard-skin-swathed warriors were allowed to join its troops on a triumphal rampage through Bunia on March 6th. Plucking Lendu arrows from his office walls, a UN official grumbles that they stole his only copy of a UN report on the looting of Congo by foreign forces.

Whichever of Ituri's two tribes is briefly in the ascendant has taken revenge on the other. In 1999, at least 10,000 people were murdered. During the UPC's repellent rule over Bunia and its outlying hills, probably as many died again. Even as Ugandan mortars rained on Bunia, the UPC's child-fighters indulged in one final killing spree. A 29-year-old Lendu man tells how his father was butchered and his sister stolen. Then he lifts his shirt to reveal shotgun wounds: with the local clinic charging $17 per pellet removed, his recovery will take time.

The Lendu fighters are just as wild. Mr Likoka's children were made to round up his cattle for the militiamen, and then hacked apart. One drunken Lendu warrior, while firing his submachinegun over your correspondent's head from a couple of yards away to emphasise a point, stumbled. Happily, no one was hurt.

The UN's peacekeeping mission in Congo is powerless to stem the deluge of blood, despite a budget of $600m a year. While expressing concern over Uganda's failure to withdraw, it has engineered a new agreement granting Uganda another month's stay in Ituri, on the ground that there is no one else to keep order. As it turns out, Uganda does appear to be quelling the killing, at least in Bunia. Townspeople from both tribes now refer to the Ugandan troops as their “liberators”.

But while Uganda remains in Congo, Rwanda seems sure to bar its rebel proxies from joining the new government. Uganda has probably had enough of Congo. It never had as pressing a reason as Rwanda to be there: the Rwandans want to disarm or kill the remnants of the army that carried out the Rwandan genocide of 1994, who remain hidden in eastern Congo's rainforest. Also, whereas Rwanda has looted systematically to pay for its war, Uganda has done so haphazardly. And as Congo crumbles, it grows harder to plunder: operations at Ituri's vast Kilomoto gold mine, for example, have virtually ceased since local peasants started digging up its airstrip and panning the dirt for ore.

The UN is scratching its head for a solution. One option under consideration is to invite a regional power—probably Angola—to send troops that would not be under UN control. This would get around the unwillingness of rich countries to send their troops to die in Congo. The UN force is too puny: its peacekeepers usually retreat at the first sound of gunfire. Uganda would probably approve such a plan, and Rwanda might assent, so long as Angolan troops did not come too close to its borders. But Congo's government, suspicious of Angola's ambitions, could object. That would be a disaster for the people of Ituri. But Congo's pudgy rulers have never worried about ants like Mr Likoka.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Hutu fighters in Congo

The war of the airwaves

Mar 27th 2003 | GOMA
From The Economist print edition

Rwandan rebels are told by one station to go home, by another to fight on

Get article background

WHATEVER happens at the negotiating tables, peace will not come to Congo until the thousands of Rwandan genocide veterans skulking in its eastern rainforest are persuaded to lay down their arms and return home. Between 15,000 and 40,000 Hutu fighters, many of them eager participants in the 1994 slaughter, have been hiding in Congo ever since. Their leaders face trial if they ever return, but the rank and file are being offered clemency and a chance to start a new life. Rwanda's current government, dominated by Tutsis, the main victims of the genocide, would rather have them growing maize in Rwanda than armed and plotting in the country next door.

The tricky part is persuading these Hutu fighters that they will not be shot if they come home. The only medium that can reach them is radio, and a propaganda war is being fought over the airwaves of eastern Congo.

On one side is “The Sun of the Great Lakes”, a thrice-weekly programme in Kinyarwanda, Rwanda's lingua franca, independently produced but transmitted, via short wave, by an independent station using Austria's state radio facilities. The host at Radio Sun, as it is known, is Alexis Nshimiyimana, a Hutu who also happens to be a former spokesman for the Forces for the Democratic Liberation of Rwanda (FDLR), the political wing of the rebels in Congo.

Soldiers who have nevertheless returned to Rwanda say that Radio Sun, which gives much airtime to those who say that Rwanda is unsafe for any Hutu, is crucial to rebel morale. It airs ideological songs and interviews with FDLR cadres, who send their best wishes to “our boys in Congo”, warning them that they will be enslaved if they go home. This message is misleading. Rwanda may not be a model liberal democracy, but returning Hutu rebels are treated quite well. Indicted *génocidaires* face prison, but others head for a World Bank-sponsored reintegration programme that includes income support for their new civilian life.

This is the message transmitted daily by Radio Okapi, a partnership between the UN mission in Congo and Fondation Hirondelle, a Swiss charity. Produced in Kinshasa and beamed by satellite to relays in seven Congolese towns, Radio Okapi began broadcasting a year ago, and now offers listeners a brief report each day. Interviews with people who have returned home tout the financial benefits of coming home, and messages from family members aim to convince rebels that the time for war has passed.

But Radio Okapi's FM broadcasts reach far fewer rebels than Radio Sun's clearer short-wave ones. Okapi transmits on short wave as well, but not on enough frequencies to ensure a consistent signal.

Radio Sun has also had problems, mostly to do with money. Its broadcasts stopped a year ago, when the Austrian government trimmed the aid budget that seems indirectly to have supported it. But by last autumn, Radio Sun was shining once again.

The suspicion is that the programme is being bankrolled by the Congolese government, which would be a serious breach of the peace accord it signed with Rwanda in July. Under the terms of this agreement, Rwanda withdrew its troops from Congo in return for a promise that Congo would stop supporting the Hutu rebels. In August, says Jean-Marie Nsabimana-Munyampeta, a disgruntled former FDLR official, Congo's president, Joseph Kabila, produced $30,000 in cash for the express purpose of relaunching Radio Sun. He speculates, however, that the alleged payment may have been a parting gift, rather than a foretaste of future solidarity.

Mr Nshimiyimana denies receiving any money at all from Mr Kabila, adding that: “We should be so lucky.” Whatever its source of finance—and Mr Nshimiyimana grumbles that it is very hard up—the programme is now back on the air.

Meanwhile, Radio Okapi is trying to work out technical problems and improve the quality of its short-wave broadcasts. UN demobilisation officers are hoping to buy some wind-up radios, and use their contacts to get them into the hands of fighters thirsty for outside information. Until the war of the air waves is won, the one on the ground seems sure to smoulder on.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Israel's security barricade

Walling them in

Mar 27th 2003 | DABAA, QALQILIYA
From The Economist print edition

The impact of the barrier that Israel is building round, and into, the West Bank

Get article background

AS WAR rages in Iraq, Israel is quietly building its own new order in the occupied territories. Ariel Sharon announced this month that the "security fence", now being erected on the northern part of the Israeli-West Bank border, should also go east, cutting the Palestinians off from the Jordan valley. More immediately, the army is recommending that the barrier be extended 20km (12 miles) into the heart of the West Bank, bringing into Israel 40,000 Jews in the three settlements (Ariel, Kadumim and Emmanuel) implanted near Nablus. Mr Sharon has yet to approve this, but is expected to.

The security barricade, begun last year, is a vast territorial barrier, sometimes 100 metres deep, comprising walls, patrol roads, electronic fences and earth trenches. It is popular in Israel, except with a handful of messianic settlers. The right sees it as a necessary cordon, sealing off Israel from would-be suicide bombers. The left sees it as defining the future political border of a Palestinian state, believing that it would follow, more or less, Israel's 1967 boundary with the West Bank.

But so far that line has been observed largely in the breach. In some places, the barricade cuts as deep as six kilometres into Palestinian land, enveloping (so far) 18,000 settlers in ten settlements. And for the "defence" of these settlers, Israel has requisitioned some of the best farmland and water resources in the northern West Bank. Palestinians living near the border are already feeling the severe impact on their lives and livelihoods.

Tulkarm and Qalqiliya are now hemmed in on three sides by the barricade. Much of their best agricultural land has been declared off-limits to farmers. Unemployment has soared. And a quiet migration eastwards has begun, with as many as 8,000 Palestinians leaving Qalqiliya for pastures new, according to the mayor, Mahrouf Zahran.

Some 20,000 people who live on the Palestinian side of the barricade have become separated from their orchards, farms and groves on the Israeli side, with their future rights of access a mystery. Fifteen Palestinian villages, with 13,600 people, are squeezed into a no-man's-land between the old border and the barricade, not allowed to enter Israel and increasingly unable to reach their lands, businesses and families in the West Bank.

Dabaa is one affected village. Chiselled into the hills south of Qalqiliya, it is home to 250 Palestinians. Most of its farmland will lie on the Palestinian side of the barricade but the village itself will remain on the Israeli side, exposed to the widening grip of Alfei Menashe, a settlement built partly on Dabaa's land and

home to 5,000 settlers. Some 700 olive trees in the village have been uprooted to clear a “buffer zone” for the settlement, and seven of Dabaa's 42 houses (home to 20% of its people) are threatened with demolition.

“An army officer told me that one day the village will have to go,” says the village head, Sadik al-Aj. Even if that does not happen, Mr al-Aj predicts death by asphyxiation. Dabaa is only three kilometres from Qalqiliya, on which it depends for everything. But the barrier will require laborious circumnavigation by villagers, through roads, checkpoints and army-controlled entrance gates, turning a five-minute journey into a five-hour one.

Mr Sharon is shaping up for a political battle over the “roadmap”—the three-year plan for ending the Israeli-Palestinian conflict—which calls for the establishment of a “provisional” Palestinian state some time this year. Mr Sharon accepts the idea of a provisional state, but wants it restricted to less than half the West Bank. Palestinians believe that the barriers Israel is now building, and the ones it may be planning to build, are borders Mr Sharon hopes to turn into a permanent arrangement.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

A dam in Mozambique

Untapped power

Mar 27th 2003 | CAHORA BASSA
From The Economist print edition

A poor country is being ripped off

AS THE sun's first rays dance on limpid waters, Bomba Kango, a Mozambican fisherman, pushes his canoe out on to Lake Cahora Bassa. It is one of Africa's largest lakes, 270km (170 miles) long, teeming with fish, and Mr Kango is sure that he will catch more than enough to feed his family. His ancestors never fished here, because the lake did not exist until 30 years ago, when Portuguese engineers wedged a massive arc of concrete across a gorge on the Zambezi river, to create the Cahora Bassa dam.

Fishing has been good for northern Mozambique, a region where few other trades thrive. Fishermen such as Mr Kango sell their surplus bream at hundreds of noisy lakeside markets. On a larger scale, scores of Zimbabwean and South African companies have come to trawl for capenta, tiny translucent fish that are scooped up in their millions each night, using high-powered lights and huge nets, before being dried and put in sacks for export to neighbouring countries. There is also angling tourism: rich foreigners pay handsomely for the chance to reel in a tiger fish.

But there are two problems. First, because of over-fishing, stocks are dwindling. Willie Beaton, a South African who runs a fishing lodge on the shore, blames the lack of effective regulation. “It's anarchy out there,” he says. “They're netting everything...even immature fish, [and in] the tributaries, where fish spawn. But the government turns a blind eye. For them it's more important that people here can feed themselves.”

Second, the Cahora Bassa dam, now owned jointly by the South African, Mozambican and Portuguese governments, was built to electrify Mozambique, but the country still remains pitch dark at night. The Portuguese sank piles into the rock and built a huge hydroelectric power station, with the capacity to generate 2,075 megawatts—enough to light up a third of Africa. Incredibly, both the dam and the power station survived Mozambique's long civil war. But today the power station is running at 2½% of its capacity. It is bleeding money into the lake.

The power project is ailing largely because Portugal signed a bad deal with South Africa in 1969. This was replaced in 1984, but the new agreement is still disadvantageous to Mozambique. Hidroeléctrica de Cahora Bassa (HCB), the company that operates the power station, is obliged to sell most of its output to South Africa, at a paltry price that, amazingly, is fixed until 2030. Mozambique then finds itself reimporting power at market rates.

The South African government, which naturally likes receiving what is perhaps the cheapest electricity on earth, refuses to let its much poorer neighbour renegotiate the terms of the contract. “The situation is absurd,” complains Carlos Vega Angelos, the chairman of HCB, “South Africa is selling back to Mozambique electricity we supplied to them in the first place, but at ten times the price.”

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

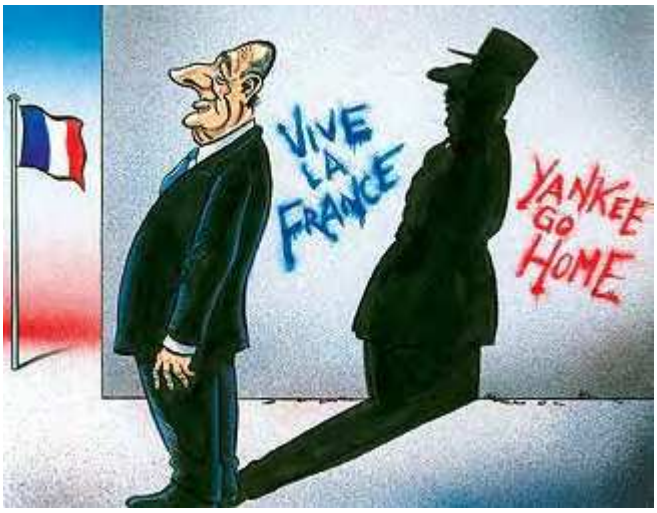
PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Jacques Chirac

Can Gaullism work today?

Mar 27th 2003 | PARIS
From The Economist print edition



Historical parallels may be giving comfort—for the time being—to France's president in his continuing row with the Americans

Get article background

“IN FRANCE'S view, if it is unthinkable that America's war apparatus will be annihilated on the spot, there is, on the other hand, no chance that the peoples of Asia will submit to the law of the foreigner who comes from the far shores of the Pacific, whatever his intentions, however powerful his weapons. In short, as long and cruel as the ordeal must be, France is certain there will be no military solution.”

So said France's President Charles de Gaulle in Cambodia in 1966, in a speech attacking America's policy in Vietnam. The American ambassador in Paris, Charles Bohlen, immediately sent a telegram to his bosses in Washington: “It is extraordinary to me that an alleged ally of the US would present...so erroneous a picture of cause and effect. De Gaulle appears to heap all the blame for the situation, its origin and development in Indochina, on the US explicitly...I realise how unwise it is to answer de Gaulle publicly but I wonder in this case if some corrective measure should not be applied. Otherwise the de Gaulle version of events will have a high degree of acceptance, not only here in France but in other countries of the world.”

So is history repeating itself in the bitter Franco-American divisions over the Iraq crisis? Not entirely. For one thing, President Jacques Chirac, whose political lineage is avowedly Gaullist, does not equate Iraq's Saddam Hussein with Vietnam's nationalist-minded Ho Chi Minh. For another, he shares the American goal of finding and removing any Iraqi weapons of mass destruction (if not necessarily the goal of removing Mr Hussein). And, whereas America's Vietnam war lasted for years, no French analyst seriously believes that Mr Hussein can hold out for more than a few weeks at the most.

Yet there are enough similarities to disturb those who have hitherto taken transatlantic friendship for granted. The diplomatic exchanges between France and America are now, as they were then, icily polite at best. Multilateral institutions are at risk. Mr Chirac's decision last month, along with Germany and Belgium, to block NATO help to Turkey recalls de Gaulle's famous withdrawal of France from NATO's military structure in 1966. Most people around the world do, indeed, agree with France's current “version of events”. And American popular sentiment is angry. Just as American restaurateurs now pour good French wine down the drain, so too in de Gaulle's day.

The question is how long such tensions will last this time—and what will be their repercussions. For all their headlines implicitly denouncing “America's war” (Britain and Tony Blair tend to be dismissed as America's poodles), France's journalists are well aware that the world has changed since de Gaulle's time and that modern-day Gaullism has its limits.

The pro-Chirac *L'Express* magazine, for example, commented recently that though one could certainly criticise the way America and Britain had chosen to go to war, and though George Bush's “messianic imperialism” was “disturbing”, it was also true that “the anti-Americanism gaining ground in Europe and encouraging—across the world—our diplomacy of pacifism will have serious consequences: we have assumed the responsibility of breaking the unity of the democratic world and of relying on allies who share little of our values. In short, we have deliberately chosen to split our natural base and to cosy up to countries that do not belong to it. Why?”

Good question. The official reply is that France has done nothing of the sort. Both Mr Chirac and his foreign minister, Dominique de Villepin, stress that France and America share the same values and, in terms of disarming Iraq, the same goal. The difference of approach is one of analysis and of tactics: Iraq, they say, is not an imminent danger; the UN arms inspectors should have been allowed enough time to do their work; and the risk of a precipitate war is that it will breed more of the terrorism that America tries—unconvincingly—to link to Mr Hussein.

Some qualms, then?

Moreover, France, they insist, never ruled out an eventual use of force, and for critics to say otherwise is a “false indictment”. As for the accusation that French obduracy has rendered the UN Security Council irrelevant, the retort is that the fault lies with the Americans, who always wanted “regime change” and therefore war, and with the British, who went along with the Americans and now use France as a scapegoat for their failure to find majority support within the Security Council.

But what if the official reply falls on deaf American ears? Though Mr de Villepin and his opposite number, Colin Powell, talk regularly enough, albeit in less warm tones than before, Presidents Bush and Chirac have not telephoned each other since February 7th. Moreover, a growing minority of voices on the Gaullist right are worried that their president's current attachment to a professed pro-UN, anti-war principle has put France in a position where it is failing to influence events in the Middle East while at the same time damaging the idea of a European foreign and defence policy—and of course NATO.

All this may augur ill for French business and its potential role in the reconstruction of Iraq. Hence some behind-the-scenes head-scratching by France's economics ministry and its big businessmen on how to ensure access to an Iraqi market for which France has been the biggest supplier under the UN's programme of limited sanctions.

Will these Franco-American tensions augur ill for Mr Chirac, too? In as much as his popularity ratings are linked to the economy, perhaps they will. But since France's prime minister is there to take the blame, its president will probably emerge unscathed, at least at home. Moreover, since President Bush must face the voters first, in the 2004 election, it is Mr Chirac, secure until 2007, who can afford to relax. Meanwhile, with his eye on the history books, Mr Chirac can cast his mind back to the 1966 crisis. Who is better remembered worldwide: President Lyndon Johnson or Charles de Gaulle?

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Spain and its regions

Asking for more

Mar 27th 2003
From The Economist print edition

Now Catalonia joins the queue

Get article background

HOW far can you stretch Spain's constitution before it breaks? Drawn up in the late 1970s in reaction against 40 years of centralist dictatorship, it already devolves wide powers to the country's 17 regions. Now they want more; too much more, say alarmed centralists and plain patriots. And this week Catalonia—number two (after Andalusia) in population, number one in real significance, think its citizens—spelled out its notions of just how much more.

The central government already faces separatist terrorism in the Basque region, and the government there campaigns, non-violently, to break away from Spain in favour of “association”. In Galicia, Spain's north-western corner, the local “nationalists”—ie, regionalists—are gaining ground, aided by the incompetence of the regional and central governments alike (both run by the People's Party) in handling an oil-slick disaster last autumn. And now Catalonia.

The region, with its 6.3m people and the great city of Barcelona, is Spain's industrial heart. It has been run for decades by Jordi Pujol, boss—that's the right word—of a “nationalist” but non-separatist coalition of parties known jointly as Convergence and Union (CiU). He has pushed the Catalan language, and has fought Madrid over various issues. But he has made no real trouble, in part, recently, because he needs People's Party help to control the Catalan parliament. Now, though, he is to retire, and his chosen heir, Artur Mas, facing a regional election—and defeat, say the polls—this autumn, has turned up the heat.

A CiU plan for reform of the region's constitution, presaged a year ago and leaked in final form this week, “recognises” the Spanish state as a fact, but affirms the “right to self-determination”. It would give the Catalan flag “pre-eminence” there; declares it the “duty” of all Catalans to know their language; wants direct Catalan representation in European Union bodies (and bodies like UNESCO, and international sport); sole control of immigration, transport infrastructure and telecoms regulation; the management and collection of all taxes, even central ones; and much else.

Separatism this is not, but it would put Catalonia at least on a par with today's Basque region—and look where some Basques want to be tomorrow.

Even so, why bother? The CiU may well lose power to Catalonia's Socialists, and when their leader, Pasqual Maragall, this week presented his plan for constitutional reform, he went much less far. Yes, but he still wants more. And to form a government he may well need the aid of a small but rising Catalan party that wants the lot: a free state associated with Spain.

Catalans are not natural separatists. But these are straws in the wind, recalling a long history of days when they were: the CiU meeting next week to approve Mr Mas's plan will be held in Cardona, the last town to fall to the troops of the Spanish king, Philip V, in 1714.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Italy's government

Of milk and war

Mar 27th 2003 | ROME
From The Economist print edition

Italy's prime minister, Silvio Berlusconi, is having a hard ride

Get article background

Reuters

Berlusconi feeling blue

AFTER months trying to please everybody—George Bush, Tony Blair, Vladimir Putin, the United Nations, the European Union—Silvio Berlusconi, Italy's prime minister, has made up his mind on two matters. The weightier issue is to do with the war. The frothier one, though a portent of a possible change in Italy's attitude to the EU, is to do with milk. Both decisions have caused ructions.

Mr Berlusconi's big decision on the war has been a judgment about how how bellicose to sound. He has been broadly behind the Americans from the start, but most of his countrymen are not. So Italy, like France and Germany, he told parliament in the days before the assault on Baghdad began, would let American forces use its airspace and its bases in Italy, provided they were not actually launch-pads for attacks. But his government would not send a single man into combat—"nor has America asked us to," said the foreign minister, Franco Frattini.

That softly pro-war stand nonetheless displeased the Catholic church (Pope John Paul is utterly opposed to the war), annoyed the centre-left opposition and enraged pacifists. But its equivocal character seemed to reassure two people he cares about a lot. One was Mr Bush, who sent Mr Berlusconi a warm letter hailing Italy as a worthy American ally. The other was Italy's president, Carlo Azeglio Ciampi, who had noted that his country's constitution "repudiates war as a way of resolving international disputes". So far he has not publicly complained about the "minimum logistical support" that the Americans have asked of Italy.

In the milk dispute, Mr Berlusconi may have gained a bit more public support, especially in the countryside and in the north. "This is a sign of a new European policy aimed at protecting our national interests," said the finance minister, Giulio Tremonti. But Italy's many believers in closer European integration are worried by the increasingly Eurosceptical tone of their prime minister. And some of Mr Berlusconi's fellow European leaders, notably a visibly furious Jacques Chirac, the French president, were extremely irritated by his readiness to hold up proceedings—and delay agreement over an EU-wide savings-tax deal—during a European Union summit on March 21st.

The issue at stake was a fine of *euro*648m ($690m) imposed on Italy because its dairy farmers had hugely exceeded their EU-ordained milk quotas. While EU leaders were trying to discuss progress towards the goals of the liberalising agenda signed in Lisbon in 2000, Mr Berlusconi was seeking to block all other business unless the milk fine was reduced. In the end, his counterparts agreed to consider the matter anew. But the Italian gambit appalled leaders of the countries at the old core of the Union who expect Italy to remain a model of Euro-helpfulness.

Not so sweet back home

The Italian prime minister has worries of his own, besides. People will soon be assessing his first two years in office. He will claim to have been unlucky, starting with the riots that spoiled his first big international showpiece, a meeting of the G8 group of rich countries in Genoa, followed by the global

gloom after September 11th. Whether or not people are forgiving, they will have noticed that Italy's economy and social fabric have continued to fray, yet the cash to mend it is in ever-shorter supply. The economy is groaning. The Bank of Italy predicts that it will grow by no more than 1.3% this year and, if the oil price shoots up, matters could become really serious. Thanks partly to a strengthening euro, exports are shrinking. And Italy is becoming less innovative: a recent survey listed Italy as holding just 1.8% of the world's high-tech patents, against France's 7.3% and Germany's 15%.

A string of reforms has been promised, postponed or apparently forgotten. Nothing has been done about pensions, which gobble up nearly 15% of GNP, the highest figure in Europe. Italy's infrastructure is creaking, in particular its roads are clogged and dangerous. And the labour market is still too rigid, despite a useful bill that passed its first stage in parliament last month. But the law still, in effect, makes big firms take on people for life—or not take them on at all. Many young university graduates find it hard to get jobs.

But there are some brighter spots. The education minister, Letizia Moratti, has enacted a new plan to improve schools by, among other things, making children start at an earlier age and study English and computers from day one. Everybody will have to stay at school for at least 12 years, a couple of years longer than before.

Even if Mr Berlusconi starts seriously tackling such shortcomings as the labour market and pensions, he will still be hobbled by his failure to confront the conflicts of interest that have dogged him, as Italy's richest man, since the day he became prime minister—not to mention his manifold problems in the law courts, where he is still on trial for bribing judges. Nearly two years after taking office, a promised law to deal with his conflicts of interest is still to be enacted. He has a personal interest in a takeover battle for Generali, Italy's biggest insurance company. Other conflicts concern his football club, AC Milan, whose chairman is also head of the national football league.

Mr Berlusconi's media interests still abound. He owns the three largest private channels and, as prime minister, has much influence over RAI, the three-channel state television company. Efforts to put a new team on the board of RAI have been fraught. The upshot, after a row that lasted several weeks, is that the new chairman is nominally on the left while the other four new board members are on the right. Several may do a fair job but it is patently hard for Italians to feel confident in their public broadcasting services' impartiality when their prime minister is so embroiled.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Chechnya's referendum

The vote of the dead souls

Mar 27th 2003 | GROZNY
From The Economist print edition

EPA

The referendum on Chechnya's future was haunted by spirits of the past

Get article background

PERHAPS it was the ghosts who voted—flowing up the steps, floating through the windows, squeezing through the bullet holes and broken walls to exercise their franchise. The authorities declared that 477,000 people turned out for Chechnya's referendum on March 23rd. That would have been 88% of registered voters. People were supposedly “standing in line at some polling stations for ten or 15 minutes”. But even on a tightly-controlled government tour of selected polling stations in and near Grozny, the bombed-out capital, there were only handfuls of people in the dusty streets—let alone voting. To anyone who has seen the activity in any country when just half the electorate takes part, in Chechnya it seemed that it was not the living souls who made up the numbers but the dead ones.

It would be fitting. Uncounted thousands, or more likely tens of thousands, have died and many more have fled since the first post-Soviet Chechen war began in 1994. Last October's census, according to preliminary figures, found nearly 1.1m people in Chechnya—a shade more than when the wars began—but in the same month the Danish Refugee Council, the aid agency most active in Chechnya, which does regular population surveys, estimated 785,000.

Never mind, then, that there was no open campaign for the no vote, that the only election monitors were a pro-Kremlin political party and a scattered handful of foreigners, or that two foreign journalists picked up ballot papers and dropped them (marked no, they promise) into the box at a polling station in Grozny. Never mind the old lady in Chernokozovo who showed a polling-station official her marked ballot paper to check if she had done it right. (“No, no,” cried the distraught official, “I told you to mark just one box!” And gave her a fresh ballot and showed her where to put the cross.) The referendum was meant as an exercise not in democracy but in political control.

Control has fragmented since the start of the second war in 1999. The rebels, nominally led by Aslan Maskhadov, still inflict heavy losses on the Russian army south of Grozny, particularly in the mountainous

regions where Caucasian clan warriors first resisted the Russian invaders two centuries ago. But Mr Maskhadov, the last man to be elected president of Chechnya, in 1997, has lost authority to more radical rebel commanders who have adopted the battle cries of Islamic fundamentalism, increasingly popular with angry young Chechen men. Meanwhile the lowlands of the north are supposed to be under the sway of a Kremlin-appointed administrator, Akhmad Kadyrov, a former mufti of Chechnya. But he shares power with a government of other centrally-appointed ministers. They have been shuffled twice recently, in what pundits interpret as attempts to clip Mr Kadyrov's wings.

It won't produce peace

So the point of the referendum was not merely to end Chechnya's separatist aspirations, which it did by adopting a new constitution that declares it firmly part of Russia. It was also to start defining who runs the place. As well as the constitution, Chechnya's voters (or their phantoms) overwhelmingly approved laws for electing the president and parliament. The elections, which may take place later this year, will be another step in the “Chechenisation” of Chechnya.

An elected Chechen government, whether the poll was fair or not, would let the Kremlin shrug off much responsibility for what happens there while appearing to honour its promise to give Chechnya “autonomy within Russia's borders”. It may also be a way to squeeze control out of military hands and into civilian ones. Kremlin-watchers debate to what extent President Vladimir Putin commands the army. Some think his inability to bring the military conflict to an end may be partly because he cannot get the army to leave. Combat pay, the siphoning-off of budget funds, arms sales, kidnapping and general racketeering make the war profitable for both sides.

And since the new constitution allows the Russian president to sack the Chechen one without giving a reason, there is little danger of his getting too independent. Nor should Chechnya's ethereal electors have any trouble choosing the president that Moscow likes best. Indeed, if Sunday's visible turnout was anything to go by, a little spiritual boosting of the numbers may be essential just to make the election valid. Mr Putin said that the event had “exceeded all our optimistic expectations.”

But whoever wins must have not just good relations with Moscow but also legitimacy among Chechens. Most are sick of the war but also distrust politicians. Some think that Mr Kadyrov, the current administrator, might turn out to be the least unpopular president. Despite a rocky time in office, capped by a rebel bombing that destroyed his headquarters in December, he may be winning support for his attempts to piece Chechnya back together. There are some “small but very positive signs” of reconstruction in Grozny, says Lars Hallberg, the country director for the Danish Refugee Council. Other analysts point to Moscow-based Chechen politicians such as Aslanbek Aslakhanov, the MP for Chechnya, or Ruslan Khasbulatov, a former parliamentary speaker. They enjoy local respect but less local experience. It remains to be seen what the spirits will decide.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Expanding the European Union

Two down, eight to go

Mar 27th 2003 | BRUSSELS
From The Economist print edition

The European Union's unopposed advance on a wave of referendums

SLOVENIA became the second of ten countries lined up to join the European Union in 2004 when, on March 23rd, it voted in favour of membership. Almost 90% of those who voted said yes. Nobody had expected the Slovenes to say no. All the same, the tally in favour of joining has pleasantly surprised the EU's people in Brussels. Perhaps more surprisingly, given the unpopularity of the war in Iraq, some 66% of Slovenia's voters (the total population is 2m) also voted to join NATO.

The Maltese vote on March 8th had been heralded as a much tenser affair. Despite its tiny population—400,000, even smaller than Luxembourg's—its vote mattered even more to the EU than Slovenia's. Not only was it the first of the referendums to be held this year in candidate countries (see table); it was probably the vote most in doubt.

Pollsters in Poland and Hungary have been saying that their no camps may be larger than current surveys suggest: many voters are apparently embarrassed to oppose EU accession openly, just as they are often shy of admitting that they may vote for racist or ultra-nationalist parties. But most pollsters nonetheless reckon that the margins in favour of joining—and the yes votes in the referendums that have taken place—are large enough to suggest that there will be no surprises in store.

All aboard!
Referendums on joining the European Union

Country	Date	For, %*	Against, %*
Malta†	March 8th	53.7	46.4
Slovenia†	March 23rd	89.6	10.4
Hungary	April 12th	73.0	15.0
Lithuania	May 10-11th	68.0	11.0
Slovakia	May 16-17th	75.0	11.0
Poland	June 8th	66.0	23.0
Czech Rep	June 15-16th	79.0	21.0
Estonia	Sept 14th	57.0‡	36.0‡
Latvia	Sept 20th	48.0‡	33.0‡
Cyprus	None planned	75.0‡	–

*Latest opinion polls of those planning to vote †Actual result ‡General public opinion
Sources: European Union; DowJones Newswires; Reuters

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Charlemagne

Drowning in a sea of structural funds?

Mar 27th 2003
From The Economist print edition

Some people are asking whether European Union cash for poor regions always helps

IN GENERAL only eccentric millionaires, intent on disinheriting their children, subscribe to the idea that being given large wads of money is bad for you. Certainly, it is not a belief that has a wide following in the European Union. Its officials in Brussels are very proud of the Union's programme of regional aid—the *euro*213 billion ($227 billion) in "structural" and "cohesion" funds being sent to poorer parts of the EU from 2000 to 2006. Regional funds are hailed as living proof of European "solidarity": the richer parts of Europe reaching out to the poorer regions, prosperous countries aiding their less well-off brethren. The EU insists that the effectiveness of such regional aid has been shown by the economic growth it has spurred in Spain, Ireland, Portugal and Greece—the four countries that are the biggest recipients. This in turn has offered bigger markets to the rest of the EU, providing a "win-win situation", as the jargon goes. The promise of gleaming new EU-financed motorways and fine civic buildings has been among the biggest inducements dangled before the ten countries due to join the club next year.

So virtuous is regional aid generally considered that it is regarded as almost treasonable in the main recipient countries to question it. But when Pedro Pita-Barros, an economist at Universidade Nova de Lisboa, tentatively raised the idea at a conference, he was surprised by the response. "Lots of people came up afterwards and said that they privately agreed with me," he says.

The most obvious way that regional aid might be damaging is by distorting priorities. Businesses spring up to exploit the availability of subsidies, most obviously for construction and "training", rather than responding to the real demands of the market. In order to qualify for it, recipient countries usually have to chip in around half of the cost of an EU-financed project. That tempts them to spend taxpayers' money on schemes that they might otherwise not bother with. This is a potential headache in a country like Portugal, which is undergoing a ferocious budgetary squeeze to keep within the euro area's fiscal rules but which is nonetheless tempted to press ahead with new infrastructure projects of marginal value—for fear of losing "European money".

Mr Pita-Barros also worries that structural aid may have a corrupting effect. "It's when you hear people seriously suggesting that Portugal should fiddle its official statistics, so that we are still rated poor enough to qualify for European subsidies, that you wonder if this has gone too far," he muses. That concern is echoed much more forcefully by a senior Greek official in Brussels. "The best thing the EU could do for Greece is to cut off the structural funds immediately," he says. "They're turning Greece into Europe's Mezzogiorno [the depressed southern part of Italy]. Anybody who works hard at a regular business is regarded as an idiot, since it's much easier to set up a project to draw in European subsidies."

Isolated complaints and anecdotes are one thing. But there is also more serious analytical work that is beginning to query the received wisdom that structural funds are an unalloyed good. A recent article* in *Economic Policy*, an academic journal, asks "Is structural spending justified?" and concludes that "certain EU interventions may be leaving countries worse off than they would have been if economic forces had been allowed to run their course." The authors, Karen Midelfart-Knarvik of the Norwegian School of Economics and Henry Overman of the London School of Economics, suggest that "EU aid programmes attract R&D-intensive industries to regions receiving relatively high amounts of aid but which are not abundantly endowed with skilled labour." The result is a distortion of economic development, as poor regions are encouraged to go high-tech, when they might be better off concentrating on more basic industries.

The EU defends its regional aid by pointing to the fact that Europe's poorer regions and countries have been catching up with the EU average over the past generation. According to the European Commission, the average GDP per person of Europe's poorest regions rose from 54.2% of the EU average in 1987 to

61.1% ten years later. The catch-up for poorer countries like Spain and Ireland was even faster; indeed, Irish income per head is now quite a lot higher than the EU average.

But the fact that poorer countries have been catching up faster than poorer regions gives the game away. Around 90% of EU aid goes to regions rather than countries. Poor European regions have been gaining on the EU average largely because most of them are in poor countries that have been growing faster than the European average. However, within the poorer EU countries, gaps in wealth between the regions are actually widening. In other words, those regions most heavily showered with EU money have done worse than the less favoured parts of the same country.

But politicians love to spend

Does that settle the argument? Not necessarily. Defenders of structural funds argue that poor regions would have been left even further behind, were it not for all that lovely Brussels loot. But that is where the doubts of officials and academics who have studied EU policies in action come into play. Look beyond the ubiquitous signs advertising EU largesse in southern Spain and rural Greece, and you get a less glowing picture.

No academic study, though, is likely to have much impact on the structural-funds industry. Those in Brussels who strive to promote the Union know that EU-financed programmes are among their most effective propaganda instruments. And what national politician can resist the temptation to trumpet a big new spending programme, particularly if it is other countries' taxpayers who are footing the bill?

---

*"Delocation and European Integration—is structural spending justified?" by Karen Midelfart-Knarvik and Henry Overman, in *Economic Policy*, October 2002.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Reactions

Britain comes round to war

Mar 27th 2003
From The Economist print edition

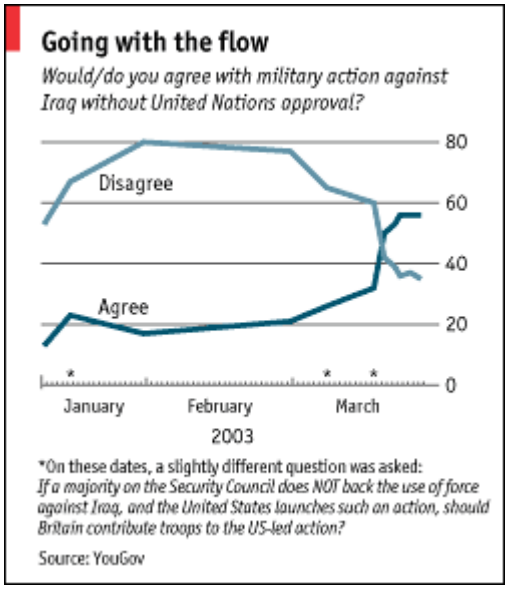
Reuters

There's been a remarkable shift in the opinion polls, but history suggests Tony Blair should not rely on it

Get article background

IF YOU'RE going to have a war, you have to have a hero. The British media have chosen one, in the form of Lieutenant-Colonel Tim Collins of the Royal Irish Regiment (above). He hasn't actually done a great deal yet, but he is a photogenic Ulsterman whose eve-of-war speech was bloodthirsty enough—"There are many regional commanders who have stains on their souls and they are stoking the fires of hell for Saddam. Show them no pity"—for the tabloids to applaud, and eloquent enough—"We go to liberate, not to conquer"—for the quality press to compare him to Henry V and Churchill.

Lieutenant-Colonel Collins's heroic profile may be among the many reasons why British public opinion has shifted so sharply (see chart). So, probably, is the silence of the anti-war politicians. They have had their say. A lot of MPs voted against the government. Three ministers resigned. Most opponents of war now share the view of Charles Kennedy, leader of the Liberal Democrats: although he did not want the war, he will support the armed forces while they are fighting it.



The media are thrilled. Wars push up television ratings and newspaper circulation. Reporters are being given greater access to the fighting than they have been in any previous conflict. The effect—as compared with the last Gulf war—is to shift the balance of coverage (and therefore of sympathy) away from pictures of bombed Iraqi babies in Baghdad, towards the advancing allied forces. Viewers are therefore with the soldiers, in a way they never have been before.

Editorial stances have changed since the war started. The *Daily Mail* and *Mail on Sunday*, for instance, touchstones of middle England, were, respectively, ambivalent and opposed to the conflict (probably less out of pacifist convictions than out of respect for the views of their

largely female, and therefore generally anti-war, readership). Both are now behind the war effort, with the *Daily Mail* arguing that the troops are being held back by excessively gentlemanly rules of engagement.

The changing nature of the anti-war movement is both symptom and cause of the shift in opinion. The protest in London on March 22nd was different to that five weeks earlier. It was smaller: somewhere between 100,000 and 400,000, compared with around 1m. Its constituents were drawn more from particular lobbies: there were more dreadlocked anti-globalisers, more Muslims and fewer middle-aged white women. It linked Iraq and Palestine more obviously: there were many *keffiyahs* and almost as many posters about Palestine as about Iraq. In the previous march, the anti-war movement looked like mainstream Britain. It no longer does.

But the most remarkable change has been in the opinion polls. At the beginning of the year, 13% thought that Britain should go to war against Iraq. Now 56% think it was the right thing to do. Attitudes to Tony Blair and George Bush have shifted similarly. A little while ago, more Britons thought George Bush a bigger danger to world peace than Saddam Hussein. Now Mr Hussein wins by a wide margin.

Opinion has shifted in favour of the war across gender, class and region; but there remain sizeable divides. Unskilled older men in the south of England (though not London—too many Muslims) tend to be pro-war. Skilled younger women in London (or Scotland) tend to be anti.

The shift in opinion should be no great surprise. Much the same happened during the Falklands war. The British public was ambivalent when the taskforce was on its way to the south Atlantic. When the war started, opinion hardened.

But the experience of the Falklands should not hold too much comfort for Mr Blair. According to MORI polls, although the public apparently liked the shooting, they didn't much like the killing. After the sinking of the Argentines' *Belgrano*, opinion went wobbly. Curiously, it did not harden again until the British had suffered some serious reversals.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Armed forces

Soldier white

Mar 27th 2003
From The Economist print edition

Britain's armed forces are solidly white. That's a problem for them

BRITISH and American troops may be fighting shoulder to shoulder in Iraq, but it's easy to tell them apart. In pictures from the Gulf, our boys stick out for two reasons: they don't wear sunglasses, and they are nearly all white.

Fewer than 2% of British servicemen and women are members of ethnic minority groups, compared with 9% of the population as a whole and 37% of the American armed forces. The British army is more diverse than the navy or the air force (both around 1% non-white), but that does not make it any more representative of British society, since many of those black and Asian soldiers are foreigners. This year, for instance, the force recruited 380 Jamaicans, 438 Fijians—and just 344 non-white Britons.

There is no reason why the armed forces ought to mirror the civilian population—as the police, for example, should. But the services will have to do better at minority recruitment if they want to keep their strength up. Competition from civilian employers is fierce at the moment, and the northern industrial towns that traditionally supplied men are in decline. As their populations fall, so the recruitment pool shrinks. For two out of the last three years, the army has fallen short of its recruitment targets.

The forces are now trying to bring in more non-white Brits, but they are up against some imposing obstacles. Only six years ago, the Commission for Racial Equality uncovered evidence of deeply-rooted racism in the army—and all the services subsequently signed up to a plan to improve the way they dealt with non-whites. Although things have got better since then, the military still struggles to convince ethnic minorities that its much-vaunted history and traditions do not extend to racial purity.

The whiteness of the military is in part just a numbers problem. As Chris Myant of the Commission for Racial Equality says, “if unemployed black men from Tottenham as well as unemployed white men from Salisbury thought of joining the army, they wouldn't have a recruiting problem.” But it is also a matter of skills shortages. As the services become more high-tech, their need for recruits with mathematical and computer skills is rising. The army tends to recruit from the lower echelons of society; and poor ethnic-minority youngsters tend to be better-educated than whites in the same social group.

The armed forces have changed in other ways, too. They now spend much of their time on peacekeeping missions, where a premium is placed on tact and sensitivity. Even when fighting, soldiers are expected to make judgments about people that go beyond appearances. In Iraq, British soldiers are trying to spot the difference between civilians, reluctant soldiers, and diehard loyalists (who may be dressed as civilians); they are not just going after people with moustaches. A military that can cope with a bit of diversity in its own ranks is likely to be better at this sort of thing.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

War costs

An affordable war

Mar 27th 2003
From The Economist print edition

So long as it is short. But the peace may prove expensive

Reuters

Bang go the tax revenues

AS GORDON BROWN prepares his budget on April 9th, he will be worrying less about the costs of fighting in Iraq than many might imagine. Though unwelcome, the bill for a short war will be quite containable and should not require tax increases to pay for it. The chancellor's bigger concern will be about longer-term pressures for higher defence spending once the war is over.

Mr Brown had already budgeted for an extra £1 billion ($1.6 billion) and he has now set aside another £2 billion. This should be just about enough. A short war is likely to cost £3.5 billion, says Mark Stoker, defence economist at the International Institute for Strategic Studies. That's one Jubilee Line extension, three-and-a-half Millennium Domes or 25 hospitals.

This estimate, which covers deployment of troops to and from the Gulf and actual fighting, is based on the cost of Britain's engagement in the Gulf war of 1991, which lasted six weeks. Then, as now, Britain deployed about 45,000 troops. The number of ships, aircraft and tanks was also comparable. The total cost in 1991 was £2.5 billion, equivalent to £3.3 billion in today's money. A longer war now would increase the bill by £750m a month, estimates Mr Stoker.

One big difference is that Britain did not pay most of the 1991 bill. Four-fifths was picked up by allies, mainly Kuwait and Saudi Arabia, but with sizeable contributions also from the UAE, Germany and Japan. But although Britain will have to meet the whole cost this time around, £3.5 billion is not much when compared with the size of the economy and the public finances. In the financial year starting in April, total public expenditure will amount to £455 billion, 41.5% of GDP.

But the bills will keep coming in after the war is over. British troops are likely to be involved in peacekeeping. Based on experience in Bosnia and Kosovo, the cost of deploying 10,000 troops in peacekeeping operations for a year would come to £1.6 billion. Britain is also likely to have to contribute to reconstruction costs and humanitarian aid, which are likely to total $25 billion, according to Mr Stoker.

Unlike the immediate conflict in Iraq, some of these outgoings could continue for years to come. That matters, says Carl Emmerson, programme director of the Institute for Fiscal Studies. “If the spending is one-off, it won't matter, but if it is permanently higher it will mean either expenditure cuts elsewhere or higher taxes.”

Probably the biggest worry for Mr Brown is whether the overall defence budget may now need to increase. At present, only 2.3% of national income goes on defence; 15 years ago, the figure was 4.4%.

If there is more of this sort of thing, defence spending will probably have to rise by more than the 1.2% annual real increase already allocated for the next three financial years. But the chancellor can probably leave that headache until the next spending round in 2004. For the time being, the war in Iraq is affordable.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Chinese students

Western promise

Mar 27th 2003
From The Economist print edition

Chinese students are flooding in to British universities

Get article background

SEEN from close to, Britain's universities are in a sorry state: overcrowded, cash-strapped and demoralised. But from far away they can look very attractive. Their marketing to foreign students is excellent, especially in China, where educating children abroad is increasingly fashionable (see article). The latest firm figures, from 2001, show around 18,000 Chinese students in British higher education. That makes them the largest group out of a total of 143,000 foreigners. And it is a 71% increase on 2000. Preliminary figures for 2002 show a further increase of 67%, taking the likely total over 25,000. By far the most popular subjects are business studies and accountancy (35%) followed by computing (14%) and engineering (11%).

On the face of it, that benefits everyone. Chinese students pay handsomely—at least £15,000 ($24,000) for a one-year MBA, or £8,000 annually for a three-year undergraduate course. That helps fill the universities' rattling coffers, especially at the hard-up ex-polytechnics, which are finding it hard to attract British students. With cash comes enthusiasm. Chinese students tend to be brighter and harder-working than their local counterparts. An engineering lecturer at a midlands university newly popular with Chinese customers waxes lyrical on the subject: “Compared to my British students they are a joy to teach. They actually like to work, and they actually know the necessary maths, like calculus, already.”

But there are big problems elsewhere, mostly reflecting a fundamental difficulty: it is easier for universities to sell their courses than to deliver what the customers want. The most mundane example is day-to-day life. British universities assume that students are, to most intents and purposes, independent adults, able to make choices about both academic and private life. Accommodation is mostly self-catering. Social life revolves heavily around alcohol.

By contrast, arrangements in China are more paternalistic. Students either live at home or sleep six to a room. Take-away food is extremely cheap. Few know how to cook or do housework—especially if they are the pampered offspring of the one-child families encouraged by China's population controllers. British habits such as pub-crawls and binge drinking are mystifying, even repellent, to them. As a result, coping with life in Britain often involves hanging out with other Chinese students—meaning that one big hoped-for benefit, exposure to an English-language environment, is muted. Yvonne Turner, an academic specialising in the Sino-British cultural gulf, says some Chinese students tell her that their English-language skills decline while in Britain.

This fits in with a second problem. Chinese university teaching is different to that in British higher education. Class discussion and questioning the teacher are rare and often discouraged. Exams are very important; group-based activities and course-work hardly feature. Memorising and regurgitating texts matter a lot; use of other source material and critical thinking skills, especially at undergraduate level, are minimal.

Coupled with the often-hesitant spoken English of many Chinese students, that can create irritation in the classroom. British students often feel frustrated by their Chinese colleagues' silence. Academics find it hard to know if they have got their points across. For their part, Chinese students are often scornful of discussions that they regard as little more than “playing”. Coming from a highly competitive system themselves, they often find the British system of assessment overly fluffy and sympathetic. Another big difference is that Chinese university teachers abandon formality outside lessons and develop close ties with their students. In Britain it tends to be the other way round.

There is a scramble to solve these problems before customers look elsewhere. Other countries are competing for the Chinese market too. One private outfit in Germany offers an English-language MBA specially tailored to Chinese students. Australia and New Zealand are stepping up their efforts too.

British universities need to manage expectations better. The British Council, the government's cultural diplomacy outfit, offers training to the agents who help Chinese families choose universities for their children. A website provides feedback and advice from Chinese students already in Britain. The better universities offer specially tailored induction courses for new Chinese arrivals—ranging from tips on shopping and public transport to thorough training in how to write essays and give presentations. That differs sharply from the boozy welcome given to local freshers. Chinese students' main priority for extra-curricular activity is not social life, points out a British Council specialist, but finding some workplace experience to go with their studies. Odd, or what?

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Anglo-Scots Union

Who won?

Mar 27th 2003 | EDINBURGH
From The Economist print edition

Scottish nationalists mourn their union with Britain. Misguidedly so

Get article background

ANYTHING to help the tourist trade. That, presumably, was the Scottish Executive's thinking when it laid on some pomp and pageantry to mark the 400th anniversary of the union of the Scottish and English crowns. But the Scottish National Party smells a rat.

To some Scottish patriots, March 24th 1603, when James VI of Scotland also became James I of England, marked the start of a slide that ended with the subjugation of the country by its larger southern neighbour. The anniversary shindigs are particularly unwelcome, they reckon, because they mean, in effect, a burst of state-financed unionist propaganda slap in the middle of the campaign for elections to the Scottish Parliament on May 1st.

For a party whose biggest electoral problem is persuading Scots to feel more self-confident about independence, this seems narrow-minded. Admittedly, the Stuarts were not a great success, and were binned in 1688 for another import, this time from Holland. But, with the Jamestown settlement in Virginia, they launched the empire, which was largely run by Scots. And Scottish dominance of today's cabinet suggests they have retained much of their power. The SNP should surely be arguing that, if the Scots can run Britain, they can be trusted to run their homeland.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Regulation

Irregular

Mar 27th 2003
From The Economist print edition

Why the government keeps rowing with regulators

WHO would be a regulator? Under the Tories, the job of holding the ring between consumers and the newly privatised industries was straightforward. Promoting competition and forcing down prices may not have been popular with newly privatised companies. But the job had political support and even a degree of permanence. Contrast this with the politically inspired sniping to which the post, energy and rail regulators have been subjected and it is clear that the risks of the job have increased. “You have to have a certain masochistic streak,” says a regulator.

The chairman of Postcomm, Graham Corbett, read in several papers recently that, according to a leak from Whitehall, he was to be sacked following a bruising fight with Royal Mail over price controls. He says that he had told the trade and industry secretary last summer that he would not be seeking a further term.

Callum McCarthy, head of Ofgem, the energy regulator, is currently involved in a clash with the energy minister, Brian Wilson, over the government's determination to promote renewable energy sources. The minister, who represents a Scottish constituency, is furious about the regulator's ruling that remote power stations should in future pay more to have their power transmitted.

Potentially the most damaging bust-up involves the rail regulator, Tom Winsor. His insistence that it is his task, not the Strategic Rail Authority's, to determine the levels of investment that the railways require has not gone down well. The eventual bill from the review he is now conducting could run into billions of pounds of additional spending which (if he is right) the Treasury would be powerless to block. “Rail regulation is a shambles,” says a Whitehall source.

The rail regulator's problems stem from the government's failure to reform the system after Railtrack was forced into liquidation. Although the renamed Network Rail is now, effectively, state-owned, there are still three regulators overseeing it—and, consequently, a power struggle between them and the Treasury.

But there are broader problems, too. The Conservatives were interested primarily in competition and efficiency. Labour has widened this agenda to include sustainable development, environment, and distributional concerns. Its 1997 review of regulation greatly increased the complexity of regulation. Dieter Helm, head of OXERA, an energy consultancy, points out that a wider set of objectives has involved regulators in politically sensitive trade-offs. Now that Mr McCarthy is supposed to worry about the energy industry's environmental impact, for instance, it makes it harder for him to push prices down.

Labour also has a greater tendency to micro-manage than did the Tories. Shortly after Labour came to power, for instance, it announced a moratorium on new gas-fired power stations in order to help the coal industry. And after last autumn's storms, the energy minister announced that he was launching an inquiry into why many households were left without electricity for days on end.

Mr McCarthy is philosophical about what he says are inevitable tensions between regulators and ministers. But he acknowledges that a lot of Labour politicians think that too many sensitive political decisions have been delegated to regulators. “No one should become a regulator and expect gratitude,” he says. John Kay, an independent economist, points out that privatisation did not get rid of the public-policy issues, such as the need to ensure supply, that led utility industries to be nationalised in the first instance. That makes it hard for politicians to keep their fingers out of those industries.

The business of regulation is too complicated and boring for it ever to become a big political issue. But

the government needs to step back, because continuing rows between the politicians and the regulators will make private investors less willing to pay for the increasing levels of investment needed in the industries the regulators oversee.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

ICI

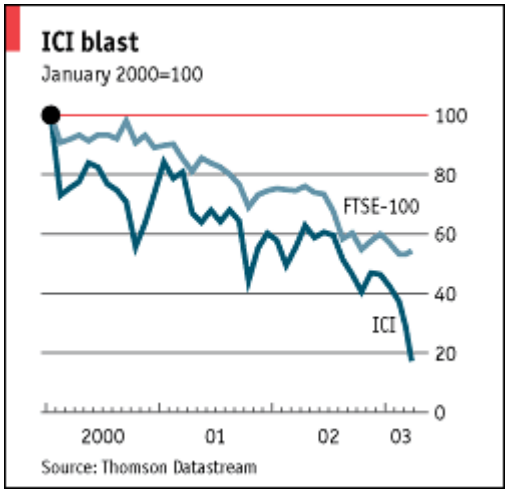
Marconi, mark 2?

Mar 27th 2003
From The Economist print edition

Once Britain's biggest industrial company, ICI is in more trouble

NO LONGER imperial, no longer in chemicals, is ICI, once called Imperial Chemical Industries and Britain's biggest industrial company, still a going industrial concern? Investors are increasingly doubtful. On March 26th, after a profits warning because of problems in its operations in the Netherlands and North America, the company's shares dropped by almost 40%. At current share prices ICI would be ejected from the FTSE 100 index of biggest companies. That would be embarrassing enough. Much worse is that the travails of ICI are looking eerily like a re-run of Marconi, another once-great British company that got into apparently sexier businesses and whose future, if it has one, is now in the hands of its bankers.

On the face of it the market's reaction was a bit extreme. ICI said that profits in this quarter would be £50m, compared with the £66m that it made in the same period last year. The problem is that the businesses that were responsible for this drop in profits—at Quest, its food-and-flavours operations in the Netherlands (whose boss promptly "resigned"), and at National Starch, its American adhesives and food starches division—have been at the core of ICI's recent growth strategy.



Much like the problems at Marconi, in other words. Under the stewardship of Lord Simpson, Marconi got out of older, boring but profitable businesses into newer, exciting but (only temporarily, of course) unprofitable ones, saddling itself with a mountain of debt in the process.

ICI, after demerging Zeneca, its drugs arm, in 1992, got a new boss, Charles Miller Smith. He came from Unilever, an Anglo-Dutch consumer-goods giant. Mr Miller Smithgot rid of ICI's boring low-margin cyclical chemicals business (at rock-bottom prices, because it happened at a dip in the industry cycle) and bought some exciting speciality-chemicals businesses (from Unilever, as it happens) for a very generous £4.9 billion in 1997. In the process, the company landed itself with debts that reached £4.2 billion in 1998. Last year, it issued £800m of new shares to reduce its indebtedness.

Given that ICI's market capitalisation is now only about £1 billion, it is fair to say that this strategy has not been a runaway success. In the company's defence, few think that it had much choice but to trade upmarket—though it is worth remembering that National Starch is suffering from price rises in the sorts of businesses that ICI got out of, and that BASF, a German chemicals company, does splendidly in this business. Still, as well as having more growth potential, speciality chemicals were supposed to be less capital-intensive and less volatile.

Perhaps all the rosy prophecies might have come true under different management, but the present lot do not inspire much confidence. "Patently incompetent," is how one (brave, anonymous) analyst describes Brendan O'Neill, ICI's affable current chief executive, who made his name running a brewery, Guinness. It is certainly hard to see how anyone other than management could have been to blame, for example, for the logistics problems that have dogged Quest.

Or perhaps ICI has simply swapped one set of unrelated businesses for another. As one analyst puts it: "There are no synergies between the sticky bits at National Starch, paints, and the smelly bits at Quest." In which case might it not be better to break the company up than to let the present management

destroy any more of its value?

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com WORLD BRITAIN
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Canary Wharf

Nailed to its perch

Mar 27th 2003
From The Economist print edition

Canary Wharf went bust once. Will it repeat the trick?

Get article background

THE tower blocks of Canary Wharf, London's second financial district, are doubtless now a permanent fixture of the capital's skyline, though not necessarily a loved one. Whether its finances are as secure is open to doubt. Shares in Canary Wharf Group (CWG), which owns much of the development, have taken a tumble in recent weeks, amid financial-market woes and nasty recent revelations about tenancy rates and rental values. Canary Wharf went bust once before, in 1992, and investors are understandably nervous that it might do the same again. Having peaked at over £5 before the terrorist attacks on the World Trade Centre, CWG shares now change hands for about £1.50.

Canary Wharf has changed a lot since 1992. It is far bigger (the estate contains 13.1m square feet of office space), connections are better (it is now served by the Jubilee Line, which usually works), and there are even quite good places to feed and water. Lots of big banks and law firms have moved there, lured not just by these facilities but also by low rents. At its peak, the difference between City and Canary Wharf rents was almost £20 a square foot.

CWG's finances also seemed to be on healthier foundations. It has generally built to order, which takes away much of the speculative risk. Its existing rents cannot go down, only up, and they have been fixed for long periods (25-35 years). Its funding has come from the issuing of long-term bonds, in which these rents are simply passed on to investors; in the argot, the rents are “securitised”, and the buildings largely taken off its balance sheet.

But cracks have started to appear in CWG's business model. It is due to complete another tower block in April, which has few tenants, making this a far more speculative venture than past buildings. The timing could not be worse. The company's shares are, in essence, a geared play on the health of financial-market operators. But financial firms and associated industries are feeling the pinch, and demand for space has fallen sharply.

This has shown up another problem: rents are not as secure as it seemed. It emerged recently that at least three tenants—Lehman Brothers, an investment bank, and Clifford Chance and Skadden Arps, two law firms—have the right to hand back a lot of space to CWG, which would then be forced to pay the rent on this space to bondholders. Post-Enron, this has done little for CWG's credibility. Vacancy rates have shot up. Merrill Lynch, an investment bank, estimates that they will be 17% by the end of next year.

Moreover, existing tenants can always sub-let their properties. If they were desperate, presumably they would take what they can get—and probably a lot less than CWG would hope to get for its new properties. Under their agreement with CWG, they must sub-let at market rents, but what constitutes a market rent is a moot point.

CWG still has wiggle room. Though rents have come down more sharply than the company cares to admit, it can probably afford to let out buildings at about £20 a square foot, because it bought the land so long ago, and because of government development grants. It could sell a building, which are admittedly of the highest quality, though whether this would send investors a good signal (demand is robust) or a bad one (it needs to) is debatable. Alternatively, it could rescind its commitment to return another £613m to shareholders via a special dividend or share buy-backs—and it is noteworthy that it has not bought back any shares recently, despite the drop in its share price.

But the company is highly geared: its debts are twice its equity, though given the amount it has

securitised, it would probably need a big client to go bust to threaten its survival. Which is not to minimise its problems. Canary Wharf's big allure—cheap rents—has gone, because City rents have fallen faster. British Land, a property company, is developing a 400,000-square-foot site in Gresham Street in the City. As one analyst asks: “Would you rather work at Gresham Street or at Canary Wharf?” It is a rhetorical question.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com WORLD BRITAIN
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Bagehot

The home front

Mar 27th 2003
From The Economist print edition

Will the politics of behaviour re-connect Labour to the voters?

THE first meeting of Labour MPs since the beginning of the war was an almost surreal affair. A few weeks ago, the appearance of Alan Milburn, the health secretary, could have been expected to provoke a flurry of dissent and newspaper stories totting up the size of the coming revolt against his plans for foundation hospitals. But few MPs even bothered to turn up. Mr Milburn, whose modest proposals for giving hospitals a little local independence from the great maw of the NHS have cast him as one of New Labour's *fedayeen*, said his piece and that was that.

Although parliamentary life goes on, MPs are as glued to the 24-hour television news channels as the rest of the country. Even their constituents have stopped troubling them for fear of hindering the war effort. As it has become clear that British and American forces have some hard and difficult fighting ahead of them, the mood is sombre rather than fractious. Temporarily overshadowed by all the recent parliamentary drama, things that seemed terribly important only a short while ago no longer burn with the same intensity.

Of course, it won't last. Even if the war drags on messily for a good bit longer, attention will eventually start to switch back to more domestic preoccupations. Inevitably, there has already been a fair bit of speculation about the ways in which the war will have altered the dynamic of the relationship between Tony Blair and his party.

From Mr Blair's always-voluble critics—a coalition of the hard-left, old Labour dinosaurs, peaceniks, discarded former ministers and a few Brownies (who may not have noticed the striking rapprochement the war has brought about between the prime minister and the chancellor)—there is much talk of his need to “re-connect” with the party. The implication is that Mr Blair's high-handedness in taking Britain into an unpopular war is all of a piece with his contempt for supposedly traditional Labour “values”. Re-connection has become shorthand for forcing Mr Blair to give up any attempt to make the public sector offer more choice and better value.

But public-service reform is not an issue that animates most Labour MPs. They tend to think the huge sums of money the government is pouring into schools and hospitals are having some effect and their attitude to controversial ideas such as foundation hospitals is pragmatic rather than ideological. When Mr Milburn signalled a few weeks ago that in due course nearly every hospital would get foundation status, some of the heat promptly went out of the argument.

What does hit the hot-buttons of most MPs is the combustible mix of issues that go under the umbrella of “security”: broadly speaking, yobbishness, low-level crime, street violence, immigration and asylum. MPs say that their mailbags overflow with anxious and angry letters from their constituents about these matters. Although crime has dropped by more than a quarter in the past five years, the poor and the vulnerable feel threatened and trapped by what they see as a rising tide of disorder around them. Asylum and immigration touch on these other worries to the extent that, as one Labour MP put it, “people believe that border policy is no longer being carried out in the country's best interest.”

Win some, lose some

Difficult though it is to use the blunt instrument of legislation to foster a more civil society, MPs probably have more real interest in the government's forthcoming anti-social behaviour bill than in anything that Gordon Brown is likely to announce in next month's budget. A former minister, Frank Field, describes responding to these concerns as the “new politics”. For Mr Field and many of his backbench colleagues,

re-connection is much more about making tangible progress in these areas than about some theological argument over whether or not to introduce market disciplines to the NHS.

Mr Blair and David Blunkett, the home secretary, could not agree more. They make no bones about their impatience with the objections of squeamish civil libertarians to their tough policies: after all, one of New Labour's most-repeated mantras is “rights and responsibilities”.

There is, however, some danger in this for the government. Re-connecting with one group can all too easily mean disconnecting with another. In its determination to prove that it identifies with the hopes and fears of Labour's traditional supporters, the government may begin to drive the many well-meaning professional and middle-class people who flocked to New Labour's banner when Mr Blair became leader in 1994 into the waiting arms of the Liberal Democrats.

The government may begin to drive many professional and middle-class people into the waiting arms of the Liberal Democrats

While working-class voters tend to feel patriotic pride in the exploits of British troops, their more sceptical, United Nations-loving social superiors are less happy about the path Mr Blair has taken them down. As for the government's toughly populist social agenda, if you don't live on a sink estate or fear that your job might be taken by asylum-seekers, it just looks illiberal and vaguely nasty.

If that were all, the government would not have too much to worry about. But with tax increases about to bite, it is those relatively prosperous middle-classes who will pay the lion's share. And they will be much angrier than their poorer and less vocal fellow-citizens if the promised public service delivery doesn't happen. Combine that with the prospect of having to bear the real cost of university education for their children and you have a potentially toxic political brew.

Important though the new politics of behaviour and security undoubtedly are, the government will still ultimately be judged by the old politics of how it taxes and spends. That is a truth Labour MPs would do well to re-connect themselves to.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Climbing the helical staircase

Mar 27th 2003
From The Economist print edition

Biotechnology has its troubles, but in the long term it may change the world, says Geoffrey Carr

“IT HAS not escaped our notice that the specific pairing we have postulated immediately suggests a possible copying mechanism for the genetic material.” With these ironic words, James Watson and Francis Crick began a biological revolution. Their paper on the structure of DNA, published in *Nature* 50 years ago next month, described the now-famous double helix. It showed that the strands of the helix complement each other. It inferred, correctly, that either strand of the helix could thus act as a template for the other, allowing the molecule to replicate itself. And it suggested that because the four types of nucleotide sub-unit of which each strand is composed can be arranged in any order, a single strand could act as a message tape telling a cell which proteins to make, and therefore what job to do.

As another Francis pointed out four centuries ago, knowledge is power. Sir Francis Bacon's philosophy of turning scientific knowledge to practical advantage eventually delivered the wealth of the industrial revolution. That technology was based mainly on the physical sciences. Now the discoveries made by Dr Watson, Dr Crick and their numerous colleagues, successors, collaborators and rivals are starting to be commercialised as well. Biotechnology is beckoning.

It promises much: more and better drugs; medical treatment tailored to the individual patient's biological make-up; new crops; new industrial processes; even, whisper it gently, new humans. A few of those promises have been delivered already. Many have not. Some may never be. Some may raise too many objections.

But the field is still in its infancy, and commercialising the edge of scientific research is a hazardous business. False starts have been more frequent than successes. The businessmen-scientists who are biotechnology's entrepreneurs often seem driven by motives more complex than a mere desire to make money, especially when they are trying to find treatments for disease. And, at the moment, there is virtually no money for new ventures, leading sceptics to question whether the field has a future at all. But that is to confuse short-term problems with long-term potential. This survey will endeavour to cover both, though with greater emphasis on the potential than on the problems. Still, the problems are real and should not be ignored.

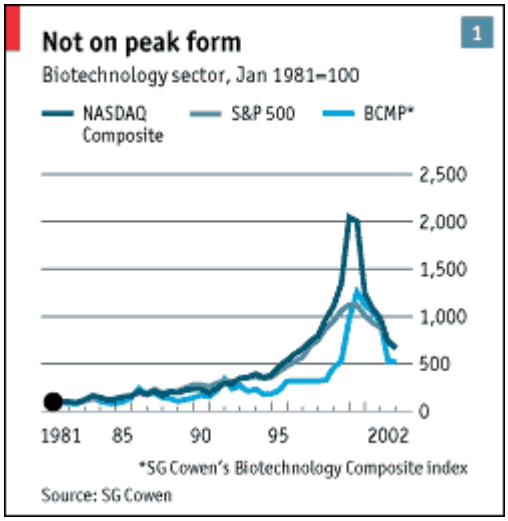
Cornucopia or white elephant?

Biotechnology has been through funding crises before, but almost everyone seems to agree that this is the worst one yet. Capital to finance new ventures has pretty well dried up. Stockmarket flotations have

stopped, and over the past three years the share prices of publicly quoted companies have declined so much that many firms are worth little more (and sometimes less) than the cash they have in the bank. Some are threatened with delisting.

It is true that all shares, and shares in high-technology companies in particular, have done badly. But it is odd that the biotech sector has been punished so severely. For those firms that aspire to be drug companies, the risks have always been high. As John Wilkerson, of Galen Associates, a health-care investment company in New York, puts it, “A biotech company is a pharma company without sales.” Only a tiny fraction of potential drugs make it through the hazardous process of clinical trials and regulatory approval. But that has always been the case. And the rewards can be high, too. Demand for the drugs that do make it is pretty much guaranteed. Medical need is not tied to the economic cycle. Share prices may have got silly at the end of the 20th century, but biotechnology is not dotcommery. Nothing fundamental has changed.

A plausible explanation for the current doldrums, offered by Stelios Papadopoulos, vice-chairman of SG Cowen, a New York-based arm of the Société Générale bank, is that in biotechnology fundamentals do not really count. Mr Papadopoulos points out that the fund managers who drove the biotech boom of the late 1990s were themselves driven by bonuses that depended less on how their funds did in absolute terms than on how they did relative to each other. To get a big bonus, managers had to beat the average.



In those circumstances, buying volatile, speculative shares looked like a one-way bet. If they went up, so did your pay packet. If they went down, you were little worse off than if you had bought something safe. And few shares were more speculative than those of a biotechnology company with a handful of wannabe drugs that might fail in clinical trials or be turned down by the regulators. Nevertheless, the fund managers' demand for such “high-beta” stocks pushed up the market for new issues, turning rising prices into a self-fulfilling prophecy. The effect was felt all the way along the chain, from the venture-capital funds to the “angels”—the rich individuals, often themselves successful biotech entrepreneurs, who put up seed money to convert promising ideas into business plans.

In a falling market, the incentives for fund managers are different. Safe, “low-beta” stocks are seen as the way to stem losses and outperform colleagues. That creates feedback in the opposite direction, making for another self-fulfilling prophecy. In the absence of stockmarket flotations, venture capitalists are left without an “exit strategy” other than a trade sale to a big pharmaceutical company, which is unlikely to be financially attractive. That means they will stop looking for any new businesses to back and start reducing the numbers already on their books.

As a result, many firms now hanging on by their fingertips are going to drop off the cliff. Some will fall because they have flaky business plans. Some will go because they failed to stock up on money at the top of the market, when it was being given away by the lorryload. A few may be brought down by scandal, for biotechnology has not been entirely free of unsavoury practices such as insider dealing.

For the bold investor, though, such conditions present a buying opportunity. Forward Ventures, a venture-capital firm based in San Diego, believes that firms which have a clear idea of the products they intend to make, and have ways of generating revenue on the slow road to developing them, are worth gambling on. Those that just want to do biological research in the hope that something marketable will turn up are not. Conversely, those that have a range of potential products based on the same technological platform are particularly attractive. Eventually, Forward's partners reckon, someone will come up with a new blockbuster drug, investors will wish they had got a piece of the action and the whole cycle will start all over again.

The old red, white and green

Leaving better medicine to one side, biotechnology has other things to offer too. Many experts in the field categorise its divisions by colour. Red is medical, green is agricultural and white is “industrial”—a broad and increasingly important category that includes making advanced enzymes with a wide variety of uses,

and will soon embrace the biotechnological manufacture of plastics and fuel.

Green biotech, too, has its problems. In parts of Europe, in particular, it is beleaguered by militant environmentalists and doubtful consumers. White has so far remained too invisible to the general public to have stirred up any trouble. That may soon change. Several chemical firms plan to market biotech plastics and artificial fibres on the back of their biodegradability and the fact that they are not made from oil, thus emphasising their environmental friendliness. That should help the makers gain the moral high ground on which producers of genetically modified (GM) crops missed out.

There is one other class of biotechnology. In one sense it is a subset of red, but it is more than that. This is the (as yet hypothetical) biotechnology of manipulating people. Human cloning and genetic engineering are the techniques that dare not speak their names. They are already under assault even though neither yet exists.

This survey will examine the practicality and ethics of manipulating people in its final chapter, but first it will look at the grubbier business of products and money, and how to make both of them. On the medical side, most of the innovation has been done by small firms. Big pharmaceutical companies, which increasingly tend to buy, rather than generate, novelty, have been getting less of a look-in. But in the fields of green and white biotech, big firms are often the innovators too.

Perhaps the biggest question this survey will try to answer is this: will biotechnology remain a niche business, or will it become ubiquitous—as widespread (yet invisible) as the products of the chemical industry are today?

In the 1870s, the science of chemistry was in much the same position as biology is now. It had recently acquired a coherent theoretical framework, the periodic table, which may not have answered all the questions but at least suggested which of them it was sensible to ask. The equivalent for biology is genomics, because a creature's genome is, in a loose way, its own private periodic table of possibility. The industrial chemistry of the 1870s was likewise similar to today's biotechnology. Then, chemists were applying their new, systematic knowledge to a limited range of applications such as dyes and explosives. Existing biotechnology is similarly limited in range. Nowadays, though, it is hard to reach out and touch something which industrial chemistry has not touched first. In a hundred years or so, will the same be true of biotechnology?

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Cluster analysis

Mar 27th 2003
From The Economist print edition

Like birds of a feather, biotech firms flock together

MARKETING departments like catchy names. Whether “Biotech Beach” will trip off the tongue as easily as “Silicon Valley” remains to be seen, though the promoters of San Diego certainly hope so. According to a report published in 2001 by the Brookings Institute, a think tank based in Washington, DC, 94 biotechnology companies were then located in that city. It wants to beat its northerly neighbour, Biotech Bay (ie, San Francisco and its neighbours, which between them have 152), in the competition to become the principal “cluster” of the new industry. That is, if that honour does not fall to Massachusetts, where 141 firms are found clinging to the skirts of MIT and Harvard.

All this sounds faintly familiar, until the realisation dawns: Biotech Bay is simply Silicon Valley by another name. Massachusetts is route 128. The “me-too” clusterettes in Europe—around Cambridge, England, for example, or Uppsala, Sweden—are also in the same places as concentrations of electronics and software companies. The same is true of Israel, which likes to regard itself as one big biotech cluster. But San Diego is the exception to the rule. The local naval base has brought some “hard-edged” technology to the area, but it is hardly a hotbed of information technology.

It does, however, have three world-class biological research institutes within walking distance of one another (if anybody did any walking around there): the University of California, San Diego, with its medical school, the Scripps Clinic and the Salk Institute. Most of the biotech ventures are similarly crowded together, some in roads with hopeful names such as Sequence Drive. In other words, this is the most clustered cluster around.

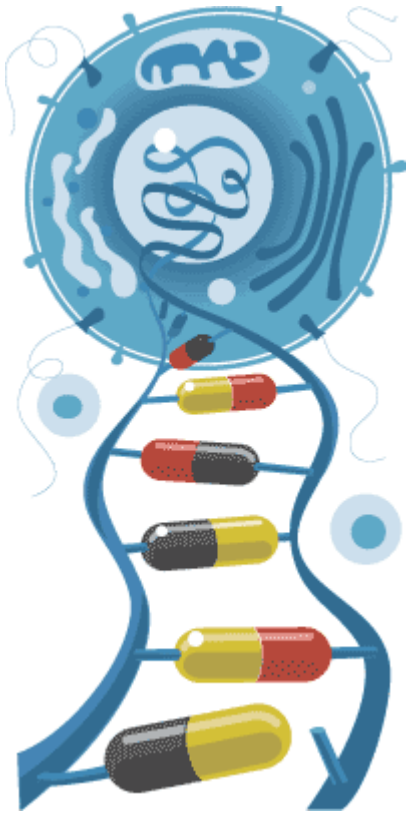
The big pharmaceutical companies are also starting to open laboratories here. Johnson & Johnson, Merck, Novartis and Pfizer have all moved in. The cross-fertilisation of ideas and staff-poaching that all this encourages gives a family atmosphere to the place, helped by the fact that many firms can trace their roots back, one way or another, to just two companies: Hybritech, a diagnostics specialist which was the first biotech success in San Diego, and IDEC Pharmaceuticals, which has been making cancer-fighting antibodies since the mid-1980s. If there is an authentic biotechnology cluster anywhere in the world, this is it. And yes, you can see the beach from some of the labs.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

A voyage of discovery

Mar 27th 2003
From The Economist print edition



Biotechnology may yet renew the pharmaceutical industry

IN THE beginning (ie, the late 1970s), doing red biotechnology was easy. You picked a protein that you knew would work as a drug, ideally because it was being used as one already. You copied its DNA into a bacterium or a cell from the ovary of a Chinese hamster. You bred those cells by the billion in big, stainless-steel fermenting vessels known as bioreactors. You extracted the protein. Then you watched the profits roll in. Of course it wasn't really quite as easy as that—but if you could get the manufacturing process right, the chance of making something that worked and would satisfy the regulators was pretty good.

That golden age will never return. Now biotech companies have to find their proteins before they can start making them. Genomics, which involves working out the complete sequence (ie, the order of the nucleotide sub-units) of the DNA in an organism, can help them do that.

Proteins are chains of sub-units called amino acids. The order of the nucleotides in a gene, read off in groups of three, describes the order of the amino acids in a protein. Read the genes and you know what the proteins should look like. That sounds like an attractive short cut, and, as a consequence, genomics caught the attention of both the public and the stockmarkets in the dying years of the 20th century. Several firms thought they could build businesses by collecting and selling genomic information, and two rival groups, the publicly funded International Human Genome Sequencing Consortium and a private company, Celera Genomics, raced to produce versions of the genome of most interest to humanity: its own. Two draft sequences were duly published in 2001, though work on polishing them continues. And lots of new genes have been discovered, with each implying the existence of at least one new protein that might, possibly, have some therapeutic value.

But genomics tells you only so much about a protein. It needs to be backed up with other sorts of -omics, too. There is, for example, proteomics (cataloguing and analysing all the kinds of protein molecule

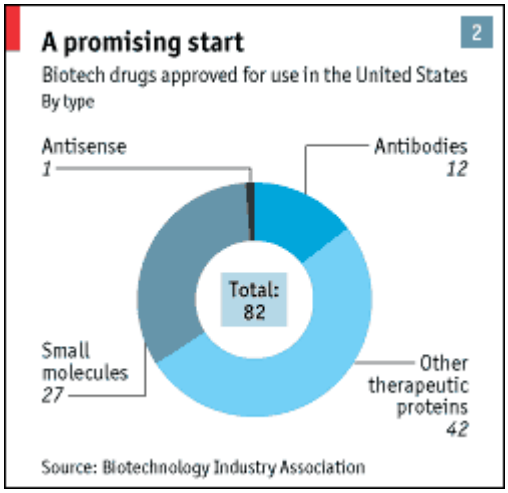
actually produced in an organism). There is transcriptomics (logging the intermediary molecules, known as messenger RNAs, that carry information from the DNA in the nucleus to the rest of the cell). There is glycomics (doing the same for carbohydrate molecules, which often affect the way a protein works) and metabolomics (studying the small molecules that are processed by proteins). There is even bibliomics, which mines the published scientific literature for unexpected connections between all of the above. But, as Sydney Brenner, who won last year's Nobel prize for medicine, once wryly observed, in biotechnology the one -omics that really counts is economics. By that yardstick, there is still a long way to go.

Ome on the range

Companies that had placed their faith in genomics are now caught in a dilemma. Investors have decided, probably correctly, that merely collecting -omics information (gen- or otherwise) and selling it to drug companies is not a big enough business to be worth doing in its own right. They would rather put their money behind firms that are trying to develop drugs. The information companies are therefore trying to reinvent themselves. However—and this is where the dilemma comes in—if new drugs are to be discovered, exploiting -omic information is one of the most likely routes to success.

Some companies have understood this since the beginning. Incyte, founded in 1991, and Human Genome Sciences (HGS), set up in 1992, both began by using transcriptomics to see which genes are more or less active than normal in particular diseases. But HGS always saw itself as a drug company, whereas Incyte was until recently more of an information company that would sell its discoveries to others. As a result, HGS now has ten candidate drugs in the pipeline, whereas Incyte has none.

Starting from scratch, it takes a long time to become a real drug company (ie, one with drugs on the market). Millennium Pharmaceuticals, another firm dating from the early 1990s, whose business model was half-way between Incyte's and HGS's, has cut the Gordian knot by buying in drugs developed by others and scaling down its in-house discovery programme.



That should work from a business point of view. So should the decision by Applera, the parent of Celera, to pull back from its grandiose plans to follow up the genome by completing the human proteome. The protein-analysing facility in Framingham, Massachusetts, where this was to be done, is now being used as a test bed for Applera's lucrative scientific-instrument business. The question is whether with hindsight such decisions will be viewed as prudent adjustments to reality or lamentable failures of nerve. And that depends on whether the programmes these firms are now putting on the back burner could eventually have been turned into profitable technological platforms for producing multiple products.

Not everyone has lost faith in –omics, though. The quest for the proteome has been picked up by Myriad, of Salt Lake City (an early biotech success, which owns the rights to tests for genetic susceptibility to breast cancer). It has formed a collaborative venture with Hitachi, a Japanese electronics firm, and Oracle, an American database company, to identify all the human proteins, and also to work out the interactions between them by expressing their genes in yeast cells and seeing which proteins like to react with one another.

That protein-interaction web will be scientifically invaluable. How much it will profit Myriad remains to be seen. Other proteomics companies, such as Oxford GlycoSciences (currently the object of a takeover battle), are more interested in comparative proteomics, which involves looking for differences between the proteins in healthy and diseased tissue. The idea is to identify proteins that might make good targets for drugs.

Even genomics still has followers, though the survivors have their eyes firmly on connecting genes to diseases, thus creating drug-discovery platforms. The buzzwords are “SNP” (pronounced “snip”) and “haplotype”. SNP stands for single-nucleotide polymorphism—a point on a DNA strand where nucleotides can vary from person to person. Groups of SNPs often hang around together, acting as markers for entire blocks of DNA. The combination of these blocks that an individual carries is known as his haplotype, and certain haplotypes seem to be associated with particular diseases. If there is a SNP in a gene, it may cause the protein described by that gene to be abnormal, leading to disease. If it is in the non-coding

“junk” DNA that forms about 96% of the human genome, it may still be useful as a marker to follow haplotype blocks around.

Several firms are running SNP/haplotype-based drug-discovery projects. Perhaps the best-known of them is deCODE, an Icelandic company that has recruited much of the country's population for its research. Icelandic genealogical records are so good that the family relationships of most living Icelanders with each other are known. That, plus the country's excellent medical records and the willingness of many people to donate their DNA to the cause, has allowed the firm to follow haplotype blocks down the generations, matching them to the diseases people have reported to their doctors. A search within the relevant block may then reveal a gene associated with the disease.

DeCODE is trying to track down the genetic underpinnings of more than 50 diseases. So far it has found the general location of genes associated with 25 of them, and pinpointed genes for seven, including schizophrenia and strokes. Its method is based on traditional genetics, involving the study of only those blocks of DNA that these techniques suggest are shared.

Perlegen, based in Mountain View, California, and Sequenom, based in San Diego, cast their nets wider by going for all the SNPs, albeit in far fewer individuals than deCODE works with. This is done by “resequencing”, in other words studying people's genomes only at the sites such as SNPs where variation is known to occur, and assuming that the rest of the DNA will be the same in everyone.

Perlegen uses sets of special “gene chips” that have short stretches of “probe” DNA containing the complement of every possible SNP dotted over their surfaces. If a SNP is present in a sample, it will stick to the appropriate probe. Sequencing an individual this way costs $2m a pop, and Perlegen has thought it worthwhile to use $100m of its start-up capital recording the genomes of 50 people. Sequenom, a longer-established firm, identifies SNPs by their different molecular weights, in a machine called a mass spectrometer.

Genaissance, another haplotype company, is taking a different tack. Instead of trying to connect genes with diseases, it is connecting them directly with existing drugs, by looking at the way people with different haplotypes respond to different treatments for what appear to be the same symptoms. Its flagship project is studying statins, drugs intended to regulate the level of cholesterol in the blood (a $13 billion market in America alone). Different patients respond differently to each of the four drugs in the trial, and Genaissance is beginning to unravel the reasons for this—or at least to be able to predict from an individual's haplotype which of the four will work best.

This sort of work is obviously valuable from a patient's point of view. Indeed, the hope is that it will one day lead to “personalised medicine”, which will identify an individual's disease risks well before a disease appears, and know in advance which drugs to prescribe. Drug companies may feel more equivocal, since even misprescribed drugs contribute to their profits. However, it should help those companies to conduct more efficient clinical trials, by concentrating them on those whose haplotypes suggest they might actually be expected to benefit from a drug. It could also be used to recognise those who would suffer side-effects from a particular drug. Not only will this reduce the cost of testing drugs, it should also increase the number of drugs approved, since they could be licensed only for use by those who would benefit safely. At the moment, only about one molecule out of every ten subjected to clinical trials is licensed. This drop-out rate is a big factor in the cost of getting a molecule to market, which can be as high as half a billion dollars.

Little breeders

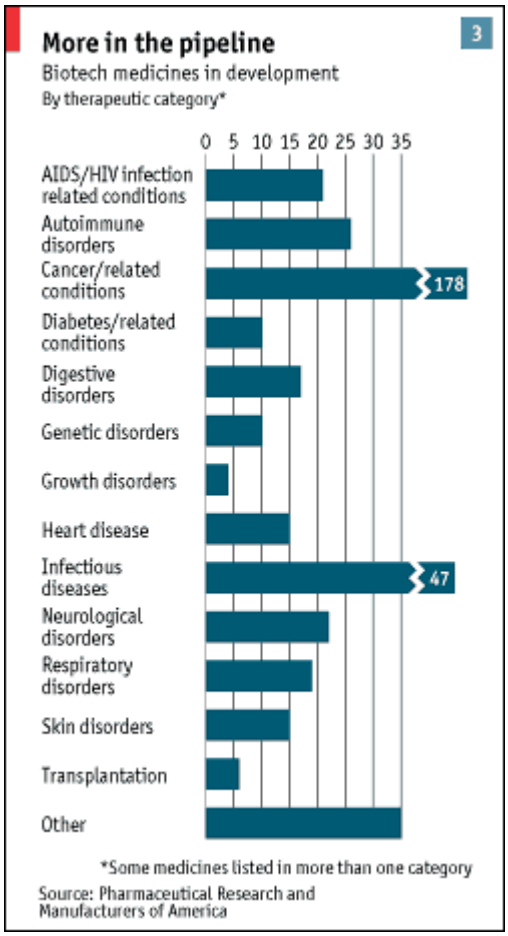
Having identified your protein, the next question is what you do with it. If you want to turn it straight into a drug, the path is long but well-trodden: trials on cells and tissues, trials on animals, trials on people and, if all that works, eventually an application for regulatory approval.

Several firms, though, are not satisfied with what nature has provided for them. They consider natural proteins mere starting points for drug development, reasoning that a drug, which is treating an abnormal situation (ie, a disease), may thus need to produce an abnormal effect. So they are trying to improve on nature.

All these firms have slightly different versions of the technology, and all, naturally, claim that theirs is the best. But the basic process for each of them is the same: identify several proteins, or several versions of the same protein, that show some of the activity you want; find the genes responsible; divide them into

pieces; shuffle the pieces to make a set of new genes, and thus new proteins; set the new proteins to work on the task you are interested in; pick those that work best; then start the whole process over again with those selected genes, and repeat as many times as required to get the result you want.

It is no coincidence that this process precisely replicates natural selection (picking out the best candidates) plus sex (shuffling material between different genes). And it works: at its best, it increases the desired activity more than a thousandfold. It can also be used to make non-medical proteins (of which more later), for which the regulations are less strict, so many of them are already in the marketplace.



Leading molecule-breeding companies working on drugs include Applied Molecular Evolution, Genencor and Maxygen. None of their discoveries has yet been approved for use, but there are some interesting prospects around. Applied Molecular Evolution, for example, has an enzyme 250 times more effective than its natural progenitor at breaking down cocaine. Genencor is engaged in designing tumour-killing proteins and proteins that will stimulate the immune system against viruses and cancers, in effect acting as vaccines.

Maxygen is working on improving a group of proteins called interferons. Interferon alpha is currently used to treat multiple sclerosis, but often with indifferent results. Interferon gamma is a remedy for pulmonary fibrosis, an inflammation of the lungs that causes permanent scarring. Maxygen's researchers think they have created more effective versions of both proteins, though these have yet to be tested in people. And, like Genencor, Maxygen is developing proteins it hopes will work as vaccines, mainly for bowel cancer and dengue, an insect-borne fever.

By no means all proteins connected with a disease are appropriate for turning into drugs, but many of those that are not may still have a medical use by acting as targets for drugs. Indeed, the traditional way of doing pharmacology is to find a drug to fit into an active site on a protein molecule, either stimulating the protein, or gumming it up, as appropriate. In the past, such “small molecule” drugs have been identified haphazardly by making zillions of different potential drug molecules, storing them in “libraries” and chucking them at each new protein to see what sticks. However, if you know what a protein looks like, there is an alternative: design an appropriate molecule from scratch.

X-ray specs

Currently the best way of finding out what proteins look like is X-ray crystallography. Pure proteins can frequently be persuaded to crystallise from solution. Fire X-rays through such a crystal and they will interact with the atoms in that crystal. The pattern that emerges will, with enough maths (nowadays done by computer), tell you how the atoms in the crystal are arranged. This works with any crystal, not just one made of protein. Indeed, it was the photographs taken by Rosalind Franklin of the X-ray patterns produced by DNA crystals that gave James Watson and Francis Crick the clue they needed to understand that DNA is a double helix.

X-ray crystallography has already generated several drugs. Viracept, devised by Agouron (now part of Pfizer) and Agenerase, developed by Vertex of Cambridge, Massachusetts, are anti-AIDS drugs that inhibit a protein called HIV-protease. Relenza, devised by Biota Holdings, of Melbourne, Australia, gums up an influenza protein. Until recently, however, X-raying crystals has been a bespoke craft. Now several firms—including Structural GenomiX and Syrrx, both based in San Diego—are trying to industrialise it. They have developed production lines for growing the proteins, and reliable ways of crystallising them. And they are making use of machines called synchrotrons that generate X-rays in bulk by forcing electrons to travel round in circles, which they do not like doing. The resulting screams of protest are beams of X-rays.

Visions of reality

X-ray crystallography has proved effective, but some firms are now looking for more direct ways to determine the properties of a protein. In theory, a protein's shape is implicit in the order of the amino acids in the chain. It is the chemical likes and dislikes of one part of the chain for the other parts that hold the folded molecule together. But to figure all this out takes vast computing power, way beyond the scope of any venture capitalist.

IBM, on the other hand, sees it as a welcome opportunity to put its ever-more-powerful machines to work. Its Blue Gene project is intended to produce a computer that can solve the protein-folding problem. Blue Gene, if it comes to pass, would be a so-called petaflop machine, able to perform a quadrillion calculations a second. The aim is to have something running at a quarter of a petaflop by 2004. If it happens, it will be a technical tour de force.

Nor are proteins the only bits of biology that can be modelled in a computer. Physiome, a firm based in Princeton, New Jersey, models entire organs. Like nature, Physiome builds these organs from the cell up. Its researchers have developed equations which describe the way cells operate. Each cell then interacts with its neighbours through virtual surface-receptor molecules and ion channels, two classes of protein of interest to drug developers. The result is virtual tissue, and such tissues can be put together to make complete organs.

Physiome's most advanced virtual organ is its heart. This is so lifelike that it responds correctly to electronic hormones and drugs added to its electronic blood supply. The hope is that it and its successors will respond equally accurately to new drug molecules, allowing virtual clinical trials to be run. Such virtual trials would not, of course, be substitutes for real ones. But they would point drug companies towards molecules that were likely to work in real people, making real trials more cost-effective. Cheaper, faster, better drugs are on their way—unless the cash runs out first.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Platform tickets

Mar 27th 2003
From The Economist print edition

How to create lots of drugs at once

THE best platform technologies of all are not those that merely enable drug discovery to proceed, but are new classes of molecules that themselves act as drugs. Therapeutic antibodies are in this category. A dozen have already been approved by America's Food and Drug Administration (FDA), and well over 100 more are undergoing clinical trials.

Antibodies are the workhorses of the immune system. Like most proteins, they have an “active site” on their surface, which is shaped to fit with part of another molecule. Unlike other proteins, though, antibodies can have active sites of many shapes. In nature, that allows them to lock on to parts of invading pathogens, neutralising the invader. In the laboratory it means that biotechnologists can create antibodies with active sites tailored to perform particular tasks.

One task they are often asked to perform is to attach themselves to a cancer cell. Genentech, the oldest biotechnology company around, has two therapeutic antibodies on the market designed do just that: Herceptin, which attacks breast cancer, and Rituxan, which attacks a form of cancer called non-Hodgkin's lymphoma. The latest wheeze, perfected by IDEC, is to attach a radioactive isotope to an antibody, so that when the isotope decays, the target cell is destroyed by the radiation. This is the most precise form of radiotherapy imaginable. Rheumatoid arthritis is another target. Humira, an antibody developed by Cambridge Antibody Technology (a British company that is one of the bidders for Oxford GlycoSciences) attaches itself to a molecule called tumour necrosis factor which is a vital link in the molecular chain that causes arthritis.

Antibodies were also at the centre of the recent ImClone scandal. When the FDA rejected the firm's most promising antibody at the end of 2001 because of sloppy clinical trials, Martha Stewart, a lifestyle guru who is a friend of the company's former chief executive, Sam Waksal, was accused of insider dealing. Mr Waksal has agreed to pay a large fine.

Scandal aside, therapeutic antibodies have proved to be a successful new class of drugs. Isis Pharmaceuticals of Carlsbad, California, has launched another new class which it hopes will be equally successful. Isis controls the critical patents for “antisense” RNA-based drugs. The first of these, designed to take on a bug called cytomegalovirus (which grows in the eyes of AIDS patients, often causing blindness if untreated), is now on sale. Fourteen others, aimed to zap inflammation and cancer, are in the pipeline.

Antisense drugs work by ambushing the messenger RNA molecules that carry the instructions for making proteins from a cell's nucleus to the protein-making machinery outside. These messengers are copies of one of the strands of a DNA molecule in the nucleus. Message-carrying strands are known as “sense” strands, hence their complements are antisense.

In principle, RNA molecules can form double-stranded helices, just like DNA does. The reason they do not is that cells do not manufacture the appropriate antisense strands. But such strands can be made by the hand of man. And if sense and antisense should meet, the resulting double-stranded molecule no longer works, so the protein the sense strand encodes is not made any more. If too much of that protein is causing a disease, mugging the messenger this way may stop the illness.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Planting a seed

Mar 27th 2003
From The Economist print edition

Despite appearances, agricultural biotechnology has been a success. Whether it will bring truly radical change remains to be seen

MEDICAL biotechnology may have its troubles, but at least most people favour developing new treatments and methods of diagnosis. Agricultural biotechnology is not so fortunate. Between 1995 and 1998, the area planted with genetically modified crops expanded from nothing to some 30m hectares, mostly in North America. Nobody noticed. Then, after a pointless experiment that involved feeding rats with potatoes modified to produce a poison, parts of Europe developed mass hysteria. In some countries, foodstuffs containing GM ingredients became almost unsaleable.

Matters were made worse by the publication soon afterwards of the results of another experiment, in which pollen from GM maize was fed to caterpillars of the monarch butterfly. The “transgene” that had been introduced was for a natural insecticide called *bt*, and many of the caterpillars died. In the eyes of some (who conveniently forgot to ask what the effect of the insecticidal spray that *bt* replaces would have been), this suggested GM crops damaged the environment. Another worry was that crops containing transgenes might cross-breed with wild plants and produce a generation of superweeds. It did not help when evidence of such escapes was found in Mexico.

In Europe, experimental fields sown with GM crops were duly trashed by environmental activists. Green biotech, evidently, does not appeal to greens. Indeed, paranoia levels are now so high that last year some African governments refused food aid that might contain GM grain, in case their own crops were “contaminated” by cross-pollination that would make them unacceptable to European consumers. Rather than risk that, they preferred to let people starve.

It sounds as though agricultural biotechnology is in trouble, but in reality it is not. Though there has been a general downturn in agribusiness recently, sales of GM seeds themselves were worth more than $4 billion last year, according to the International Service for the Acquisition of Agri-biotech Applications (ISAAA), which monitors the spread of GM crops. The area planted with genetically modified crops now amounts to almost 60m hectares—admittedly only 4% of the world's arable land, but a 12% increase on the year before. Where GM strains of a crop species are available, they are starting to dominate plantings of that species. Half the world's soyabean crop is genetically modified. And despite the panic in Africa, three-quarters of those who plant GM crops are farmers in the poor world.

All the same, GM crops have not lived up to the sales patter. In 1996, when such crops started to be introduced in earnest, the market was dominated by just two sorts of modification. One was the addition of *bt* in order to reduce the need for insecticides. The other protected crops against a herbicide called glyphosate, allowing them to be sprayed more effectively. Moreover, only four crops—soya, maize,

canola (a high-yielding form of rape) and cotton—accounted for almost all the GM-planted area.

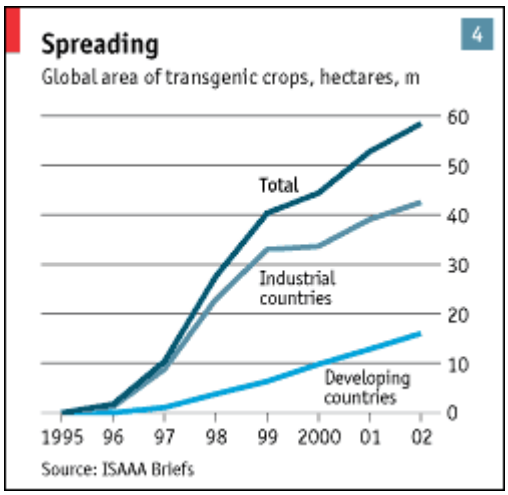
The optimists claimed that this was only the beginning. A few years hence, they said, the world would enjoy better, more nutritious crops, which would be drought-resistant, cold-resistant, salt-resistant and virus-resistant. All this would amount to a new green revolution, courtesy of genetic modification.

In practice, all that has happened is that the protection genetic modification provides against herbicides and insects has been made a bit more effective, and some plants previously protected against one are now protected against both. There have been no genuinely new modifications—which is a pity, because there are a lot of good ideas around, and the poor world in particular could do with them.

Crop circles

It is too easy to blame finicky consumers and Luddite environmentalists for this state of affairs. They have played their part, but the real culprit, as the Nobel-prize-winning Dr Brenner observed, is economics.

The genetics of maize allow the seed market to be controlled by a handful of big firms, including Monsanto, which owns the *bt* and glyphosate-resistance transgene patents. Maize, soya, cotton and canola are supplied to farmers as so-called F1 hybrids, produced by crossing pure parental strains grown exclusively by the seed companies. F1 hybrids do not breed true, so farmers must go back to the seed merchants for new supplies each year. Developing a marketable transgenic strain is almost as costly as developing a new drug, and this kind of control of the market helps to make investing in transgenics worthwhile. Opponents of GM crops who claim that transgenics concentrate power in the hands of seed companies have it backwards. In reality, only those crops already in the hands of such companies have got the treatment.



Another factor is market size. Even if the market is captive, it has to be big enough to justify the investment. Wheat, with a planted area in North America that is about two-thirds that of maize, would be worth genetically modifying. Indeed, Monsanto has developed a glyphosate-protected strain of wheat and hopes to have it approved soon. But transgenic versions of less widely planted crops may never become worthwhile unless the technology gets much cheaper.

Economics also helps to explain why such modifications as have been made are aimed at the farmer rather than the consumer. It has been possible for several years to make seeds containing healthier oils or more vitamins (eg, the famous vitamin-A-enhanced “golden rice”). But such modifications are commercially pointless, at least in the West, where most crops are used in processed foodstuffs rather than sold as raw ingredients. If people want extra vitamins or particular oils, it is easier and cheaper for the food manufacturers to add these in the factory. The retail market for raw ingredients is simply too small to justify spending money on the development and approval of modified versions. And those in the rich world who care about their ingredients might well resist the idea of a new GM strain, however healthy.

Farmers, on the other hand, can see the virtue of paying a bit more for their seed if that allows them to use fewer chemicals. So it is not surprising that the only people interested in using genetic modification to enhance the nutritional qualities of crops are farmers—and they want it for animal feed.

To oblige its customers, Monsanto has formed a joint venture with Cargill, another large agriculture company. This will modify the protein composition of soya and maize grown for animal feed, boosting the levels of essential amino acids (which animals cannot make but have to obtain from their diets). A second deficiency of animal feed, its lack of useful phosphorus, is being tackled by Diversa, a San Diego-based protein-evolution firm. One of its most promising ideas is not a protein-based drug, but an enhanced version of a bacterial enzyme called phytase, which has just been approved by the American authorities. Feed contains plenty of phosphorus, but most of it, particularly that in soya, is bound up in a chemical called phytic acid, which mammals cannot digest and which also inhibits the absorption in the gut of trace nutrients such as zinc. Phytase breaks up the acid, liberating the phosphorus and helping micronutrient absorption. That means less need for supplements, and therefore cheaper feed.

A stressful future?

In rich countries where farmers are being paid to take land out of cultivation, improving the resistance of crops to salt, cold and drought is of no great interest, but that has not stopped research completely. For example, Mendel Biotechnology, a small firm based in Hayward, California, has been investigating resistance to such stresses in a plant called *Arabidopsis*, a genetic workhorse that has had its genome completely sequenced. Stress-resistance is known to be controlled by biochemical networks that involve several hundred proteins. Fiddling with these proteins one at a time is unlikely to have much effect, but Chris Somerville, Mendel's boss, thought that the networks might be “tuned” to be more or less active through the use of transcription factors—proteins that regulate the transcription of messenger RNA from genes, and thus control how much protein is produced from a gene.

In partnership with Monsanto and Seminis, the world's largest vegetable-seed firm, Mendel's scientists checked all 1,900 transcription factors produced by *Arabidopsis*. They identified those involved in protecting the plants from salt, cold and drought, and found that altering the expression of those factors could protect the plant more. For example, they produced a strain of *Arabidopsis* that tolerated 17°C of frost. The technique works in crop plants, too. Whether it will ever be commercially viable is a different question. But it might help farmers in the poor world, where drought, in particular, is often a problem. Mendel has offered to donate its drought-protection technology to the Rockefeller Foundation, a large philanthropic organisation, for just that purpose.

Rich farmers, though, might be interested in genes that do the same jobs as existing transgenes, but do them better. To this end researchers at Verdia, a subsidiary of Maxygen, have taken natural fungicidal, insecticidal and herbicide-detoxification genes and improved their efficacy up to a thousandfold. They have even tinkered with rubisco, one of the proteins involved in photosynthesis, and managed to improve its productivity.

Fiddling with photosynthesis would certainly be a radical idea. But biotechnology may also bring radical change of a different sort to farming. Cotton aside, most GM crops are grown for food. Yet white biotechnology could revolutionise the use to which the countryside is put, shifting it away from growing food and towards growing raw materials for industry.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Pharming today

Mar 27th 2003
From The Economist print edition

A novel way to make drugs

DOLLY the sheep, the first mammal to be cloned from an adult cell, died a few weeks ago. Despite the hopes of her inventors at the Roslin Institute in Edinburgh, she did not usher in a new era of animal husbandry. Neither cloning nor genetic modification of commercial farm animals has taken off. Normal breeding, says Harry Griffin, the institute's boss, is more effective, as well as easier.

A handful of firms, though, are pursuing a different take on farming. They are designing animals (and also crop plants) as factories for making therapeutic proteins. Two of these companies lead their respective fields. GTC Biotherapeutics, of Framingham, Massachusetts, is using livestock to make its drugs. Epicyte, based in San Diego, hopes to pull off a similar trick with maize.

GTC's technique is to get its animals to secrete the desired protein into their milk. The gene for the protein in question is inserted into a goat's egg, and to make sure that it is activated only in udder cells, an extra piece of DNA, known as a beta-caseine promoter, is added alongside it. Since beta caseine is made only in udders, so is the introduced protein. GTC now has 15 varieties of engineered goat and is branching out into cows, which have a bigger yield of milk and therefore protein.

Although the firm has yet to bring a product to market, it has high hopes of a substance called antithrombin-3 (AT-3). This is an anti-clotting agent used in coronary-bypass operations and to prevent deep-vein thrombosis in susceptible individuals. A non-caprine version is already approved for use in Europe and Japan, where the combined market is worth $250m a year. GTC hopes to undercut suppliers of those markets if its version of AT-3 passes muster, and also to introduce the drug in America.

Epicyte's researchers have persuaded maize plants to make therapeutic antibodies and express them in large quantities in the endosperms of their seeds, using a promoter-based trick similar to GTC's. This allows the antibodies to be extracted easily, cheaply and in a pure state. The researchers picked maize because the food-processing industry already has a huge amount of experience with this crop. Other products in the works include antibodies against herpes and respiratory syncytial virus, which causes dangerous lung infections in children. In addition, the firm is developing an antibody to one of the proteins involved in Alzheimer's disease. But, like GTC, it has nothing on the market yet.

Besides turning out drugs cheaply (at $1-2 a gram, compared with around $150 a gram from a bioreactor), both of these technologies are easy and inexpensive to scale up. A traditional protein-drug factory costs $200m-400m and takes between three and five years to build. A new strain of goats costs $100m to develop and takes 18 months. And if more capacity is needed, growers can expand quickly by simply breeding more animals or planting more fields.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Reinventing yesterday

Mar 27th 2003
From The Economist print edition

Biotech's biggest use may be to rebuild basic industries

ONCE upon a time, much of the man-made world consisted of things that had been grown. Clothes, carpets, bed-sheets and blankets were woven from wool, flax, cotton or (if you were lucky) silk. Shoes were made of leather. Furniture and fittings were made of wood, which also served as fuel for heating and cooking. Then humanity discovered coal, oil and chemistry. Today only the poorest and the richest people burn wood, and many of its other uses have been taken over by plastics. Natural fibres, too, have ceded much of the market to artificial ones. But biology may be about to revenge itself on the synthetic, petroleum-based industrial world by providing new materials and fuels. And in this guise, it may even become acceptable to the environmental movement.

In truth, biotechnology has been quietly working away at industrial applications for some years. It started with enzymes. A business in purifying and selling bacterial enzymes for use in food manufacturing, washing powders and so on has existed for decades, but in 1988 a Danish firm called Novozymes produced the first transgenic enzyme, a fat-digester for detergents. Partly thanks to this lead, Novozymes is now the world's largest enzyme manufacturer, hotly pursued by several other firms.

Enzymes are proteins, which have a reputation for being fussy molecules. Expose them to the wrong temperature, acidity, salinity or pressure and they stop working, sometimes permanently. And the temperature, acidity, salinity and pressure of industrial chemistry is often very different from that found in familiar living organisms. However, it has become clear that lots of bacteria thrive in conditions that used to be regarded as hostile to life. Quite a cottage industry, known as bioprospecting, has developed to collect these bacteria from hot springs, soda lakes, arctic rocks, industrial-effluent outlets and so on. Enzyme companies then analyse the bugs for proteins that look like useful starting points for the sort of directed evolution used by firms such as Applied Molecular Evolution, Genencor and Maxygen in their search for drugs.

Enzyme-catalysed processes have always been a more efficient way of making molecules than traditional chemistry. They often involve fewer synthetic steps, and the yield of each of those steps is almost always close to 100%, whereas the cumulative losses from step to step of doing things in a complicated traditional synthesis mean that the yield may easily end up below 10%. But until recently, the range of reactions for which enzymes could be used was limited, and their fussiness confined them to high-value products such as drugs and vitamins. Now, thanks to directed evolution, there is serious talk of using enzymes to make cheap, bulk chemicals. And not only talk: action, too.

Material progress

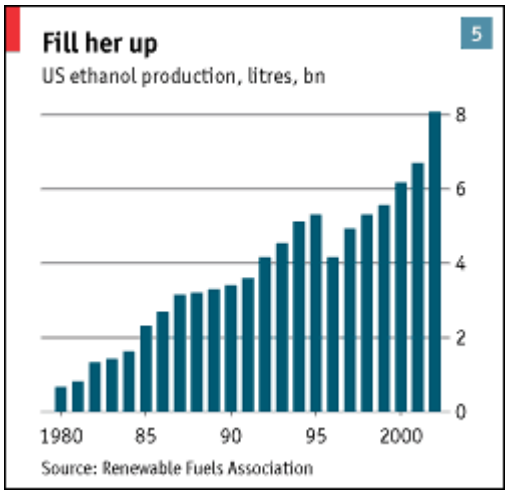
The most promising applications for the new model enzymes over the next decade are plastics and fuels. The two most advanced plastics projects are those of DuPont, one of the world's biggest chemical companies, and Cargill-Dow, a joint venture between the agricultural and chemical firms of those names.

DuPont's process, developed in collaboration with Genencor, took biochemical pathways from three different micro-organisms and assembled them into a single bacterium. The raw material for the process is glucose syrup made from maize starch. This is converted into a molecule called 1,3 propandiol, which is used to make a polyester called Sorona. But Sorona is only half biological. It is a copolymer—that is, it is made out of two sorts of monomer—and the other one, a molecule called terephthalate, still has to be made from oil, so there is some way to go.

Cargill-Dow is closer. Its product, Ingeo, is made out of lactic acid, which in turn is made from glucose. Traditional techniques are used only for the polymerisation of the individual lactic-acid monomers into polylactic acid (the chemical name for Ingeo). The stuff is being made in commercial quantities at a plant in Nebraska, and is about to go on the market. At the moment it is rather more expensive than its petrochemical competitors, but Cargill-Dow hopes to brand it as a premium product in the market for environmentally friendly goods.

Biopolymers are environmentally friendly twice over. Since their manufacture uses little in the way of fossil hydrocarbons, they do not add to global warming. And because they are biodegradable, they cause no pollution when discarded. The firms' bigwigs seem hopeful that this will prove a big enough attraction to allow them to reap economies of scale that will then make their products truly cost-competitive.

DuPont and Dow are giants, but biopolymers can be for minnows too. Metabolix, a small firm based in Cambridge, Massachusetts, takes the process for making them to its logical conclusion—by getting living organisms to do the polymerisation as well as making the monomers.



Animals and plants store surplus energy in the form of carbohydrates, oils and fats. Some bacteria, though, use a different molecule, called a polyhydroxyalkanoate, or PHA. About a decade ago, when they were working at the nearby Whitehead Institute, James Barber and Oliver Peoples, the founders of Metabolix, realised that this material might be put to use as a plastic. They have spent the past ten years proving the point.

Having prospected the bacterial world for appropriate enzymes, and assembled enzymatic pathways in the same way that Genencor did for DuPont, they came up with something new: bugs that actually make plastics and store them inside themselves, in large quantities (about 80% of the weight of a grown bacterium is plastic) and in great variety. PHAs are not a single chemical, but a vast molecular family. Different enzyme pathways can turn out different monomers, producing plastics with different properties. Indeed, it is possible to have two different enzyme pathways within the same bacterium. The result is a co-polymer that expands the range of properties still further.

Metabolix, which plans to start commercial production later this year, has shown that its PHAs, too, can be produced at a price which is competitive with at least the more expensive existing polymers, such as polyesters. That in itself may not be enough to convince manufacturers to switch from tried and trusted materials to Metabolix's novel ones, but the firm hopes that in the large market for single-use items the added feature of biodegradability will be a clincher. If manufacturers do not make the change unprompted, then a nudge from the regulators might be expected. Currently, plastic is a persistent form of rubbish, whereas an object made of PHA will disappear in a few weeks if dumped in a landfill, or even in the sea.

Get the price right, then, and the opportunities are enormous. According to a report published in 2001 by McKinsey, a consultancy, by 2010 biotechnology will be a competitive way of producing about a fifth of the world's chemical output by value. That means white biotech will be competing in a market worth $280 billion, of which McKinsey thinks the technology might capture about $160 billion. As biotech processes become cheaper, those numbers will increase.

All the companies working in this field have projects designed to bring down the costs. Metabolix, for example, hopes to switch from growing plastics in bacteria (which have to be fed) to growing them in plants (which will make them out of water, carbon dioxide and sunlight). The firm's researchers have already shown that this is possible in the laboratory. They are now scaling up the process.

The enzyme firms, meanwhile, are working on an idea that would allow whole plants to be used as

chemical feedstock. Glucose syrup is a refined product, made from maize grains, which form only a small part of the plant. Maize grains cost about $80 a tonne. That is cheaper than petroleum, weight for weight, but the researchers think they can improve on this. Instead of the grains, which are the most valuable part of the plant, they are trying to find ways of using the waste, which fetches only about $30 a tonne for silage. Unfortunately, it consists mainly of cellulose, a natural polymer of glucose but a recalcitrant one.

Help, though, is at hand. The reason dead plants do not stay around indefinitely is that they are eaten by bacteria. These bacteria contain cellulose-digesting enzymes known as cellulases. Genencor and several of its rivals are using this as the starting point for building a better cellulase. Verdia, Maxygen's plant-biotechnology subsidiary, is hoping to go one better. Its researchers are working on developing a cellulase that the plant would make in its own cell walls. To prevent the enzyme digesting the living plant, it would be tweaked to work most effectively in conditions found not inside plants but in bioreactors.

If these ideas come off, then an era of limitless supplies of glucose could follow. That would allow the production not only of as much plastic as anyone could want, but also of another product that can easily be made from glucose: ethanol. This is not only the active ingredient of booze, but also an efficient fuel. Henry Ford's first car was powered by it. Today, some of the motor fuel sold in Brazil is pure ethanol, which modern engines can be tuned to run on happily, and the rest is 20% ethanol. Even in the United States nearly a tenth of all motor fuel sold is a blend of 90% petrol and 10% ethanol. And since the carbon in ethanol made from plants came out of the atmosphere, putting it back there cannot possibly cause any global warming.

At this point some people in the industry turn starry-eyed and start talking about a future “carbohydrate economy” that might replace the existing “hydrocarbon economy”. The countryside would be rejuvenated as a source of raw materials. Land now taken out of cultivation would be put back to use. Small-scale chemical plants to process the stuff would pop up everywhere. And the oil-producing countries would find themselves out of a job.

Surprisingly, these visionaries are often hard-headed businessmen. Even more surprisingly, the numbers they are bandying do not sound all that exotic. The American market for bioethanol is already 8 billion litres a year (see chart 5). The enthusiasts at Genencor reckon it could be as high as 75 billion litres a year by 2020. That would be enough to replace two-thirds of America's current petrol production. In January, a Canadian firm called Iogen opened a small cellulase-powered pilot plant that converts straw into ethanol.

The germ of an idea

Finding enzymes such as cellulases involves, as mentioned earlier, bioprospecting. But there is bioprospecting, and then there is Craig Venter. Dr Venter was the man behind Celera, the company that took on the Human Genome Consortium. The firm got its scientific edge from a technique called whole-genome shotgun sequencing, which he had developed to work out the genetic sequences of bacteria in one go. Using the money Celera had raised, Dr Venter applied the technique to the much more complicated task of working out the human genome in one go. Now, he proposes to apply it to entire ecosystems, working out the genomes of all the critters in them by a similar, one-step approach. Admittedly the critters are bacteria, and the ecosystems are water samples from the Sargasso Sea. But such samples will have thousands of species in them, most of which cannot be cultured in the laboratory and are therefore inaccessible to standard sequencing methods.

Whole-genome shotgunning works by shredding the DNA of an organism into tiny pieces, sequencing the pieces, then sticking the results together again in the right order, using a powerful computer and clever software. Whole-ecosystem shotgunning aims to do the same with all the DNA in a sample, regardless of how many species it comes from. If the software is good enough, it will be able to sort the pieces into the individual genomes.

Dr Venter is full of ideas about what might be done with his discoveries, even before he has made them. But he is particularly excited by the possibilities for energy generation, and recently set up a new organisation, the Institute for Biological Energy Alternatives, to investigate them further. In his view, replacing petrol with ethanol is old-think. New-think would power the world not with internal combustion engines but with fuel cells. And fuel cells use hydrogen.

One way to make hydrogen biotechnologically might be with a bug called *Carboxydothermus*, which was discovered in a hydrothermal vent (an undersea volcanic spring) off the coast of Russia. This species lives by reacting carbon monoxide with water. One of the waste products is hydrogen. A more promising route might be to intercept the hydrogen ions produced in the first step of photosynthesis. Another of Dr Venter's pet projects, creating a bacterium with a completely synthetic genome, could come into its own here. By leaving out the genes for the sugar-forming pathways that normally use these hydrogen ions, such a creature could be made to devote all its energies to producing hydrogen. Nor could it escape into the outside world (always a worry with bio-engineered bugs), because it would lack the biochemical apparatus to survive there. Thus trapped, it could, he muses, be used in solar-powered fuel cells for such applications as portable computers.

That points to the power of industrial biotechnology to create completely new products. The idea of a partly living fuel cell may be merely dipping a toe in the ocean of possibilities. Another dipped toe is that of Nexia Biotechnologies, based in Quebec, which is using technology similar to that of GTC Biotherapeutics to turn out spider silk in goats' milk. Spiders, observes Jeffrey Turner, the firm's boss, have been perfecting silk for the past 400m years. Such silk comes in many varieties, which do different jobs for spiders and can thus do different jobs for people. For Nexia's products, these jobs range from stopping bullets when the silk is worn as body armour to stitching up eyeballs after surgery.

Some firms, such as Genencor, are starting to explore wilder shores. As proponents of nanotechnology (the incipient field of building devices a few billionths of a metre across) are wont to observe, biology is natural nanotechnology. Why, then, go to all the trouble of creating an artificial nanotechnology from scratch? Genencor is collaborating with Dow Corning, a big materials company, in this area. Among other things, the firms are looking at rhodopsins, the protein molecules that act as light-detecting pigments in a range of organisms from bacteria to people. Genencor has bred 21 rhodopsin-type molecules, each of which responds to a particular wavelength of light. These molecules might have applications as switches in photonics, the as yet largely hypothetical idea that data could be processed by light instead of by electronics. These are small-scale investments, and may come to nothing, but they are worth a flutter.

However, there are shores yet wilder than these awaiting, where big battles are almost guaranteed. For among the prospects offered by biotechnology is one hitherto reserved for science fiction: tailor-made humans.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

The bugs of war

Mar 27th 2003
From The Economist print edition

Almost certainly on their way

SOONER or later, almost every new technology is pressed into service in warfare, and that is likely to go for biotechnology too. In one sense, that is trivial. As biotechnology, like chemistry before it, yields new materials, fuels and other industrial products, these will be used to make military matériel. But biotechnology, again like chemistry, may also yield new weapons.

Most civilised countries have signed conventions that prohibit them from deploying—indeed, from manufacturing—biological weapons. The same is true of chemicals, and civilised countries do not use chemical weapons either.

But uncivilised countries do, and so do terrorists. If they thought biological weapons served their cause, they would probably use them, too—especially if biotechnology helped to make such weapons far more effective than they are now.

This is an area that people are understandably reluctant to talk about, but the most terrifying act possible short of letting off a nuclear weapon would probably be to spread a lethal plague. At the moment, it is generally agreed that smallpox has the best mixture of transmissibility and deadliness to do the job effectively. But a better bug might be engineered.

Putting a viral genome together from scratch would not be that hard or expensive (perhaps $1m), and it could probably be done without anyone noticing. Many companies sell short stretches of DNA and RNA, called oligomers, for research purposes. In principle, any viral genome can be stitched together from such oligomers. Indeed, last July Eckard Wimmer and his colleagues at the University of New York's Stony Brook campus announced they had created a polio virus from scratch this way.

If orders for the oligomers were spread between, say, a dozen different firms, no one would spot what was going on. A group of scientists could then “custom build” a viral genome, picking genes from different natural viruses for different properties, such as virulence and transmissibility. The genetic sequences of many such viruses are available in public databases, and more are being added all the time.

In America, the most likely target of such terrorist ire, people are starting to think about the problem. Better and faster gathering of information on symptoms that people are reporting to their doctors might allow an epidemic to be detected early, but if it was caused by a previously unknown agent that would be no help in treating it. And new vaccines currently take years to develop. Whether biotechnology can reduce that time is moot.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Man and superman

Mar 27th 2003
From The Economist print edition

Biotechnology could transform humanity—provided humanity wishes to be transformed

WARNING against intellectual arrogance, Alexander Pope wrote: “Know then thyself, presume not God to scan; the proper study of mankind is man.” But his words have turned out to be misguided. Though studying man may not exactly have led scientists to scan God, it has certainly led to accusations that they are usurping His role.

More drugs; cheaper food; environmentally friendly industry. Who could object? But people do. The image that haunts biotechnology, and perhaps the most influential piece of science fiction ever written, is Mary Shelley's “Frankenstein”. When the book was first published in 1818, most people did indeed believe that life was created by God. Shelley's student doctor apes that act of divine creation and comes a cropper. He has come to epitomise the mad-scientist figure: either downright wicked, or at the least heedless of humanity's good.

The book's subtitle, though, is telling: “The Modern Prometheus”. Prometheus, in the Greek myth, stole fire from heaven and gave it to mankind with the intention of doing good. The reason Prometheus was punished by his particular set of gods was that he gave mankind power, and with that power, choice.

Biotechnology is not about to create a human from off-the-shelf chemicals, nor even from spare parts. But it may soon have the power to manipulate human life in ways which could bring benefits, but which many will find uncomfortable or abhorrent. A choice will have to be made.

Clones to the left of me...

No one has yet cloned a person, or genetically modified one, at least a whole one. But people are working on technologies that could help to do these things.

An existing individual might be cloned in several ways. The first would be to persuade a cell (say a skin cell) from the individual to be cloned that it was, in fact, a fertilised egg. That would mean reactivating a whole lot of genes that skin cells don't need but eggs do. As yet, no one knows how to go about that.

The second way is the Dolly-the-sheep method, which is to extract the nucleus of an adult cell and stick it in an egg from which the nucleus has been removed. That seems to trigger the desired reprogramming. Or instead of putting the nucleus into an egg cell, it might be put into a so-called stem cell from an early embryo. Embryonic stem cells can turn into any other sort of cell, so might possibly be persuaded to turn into entire people.

Regardless of that possibility, embryonic stem cells have medical promise, and several firms are currently studying them. Geron, the most advanced of these firms, has worked out how to persuade embryonic stem cells to turn into seven different types of normal cell line that it hopes can be used to repair damaged tissue. Blood cells could be grown in bulk for transfusions. Heart-muscle cells might help those with coronary disease. “Islet” insulin-secreting cells could treat diabetes. Bone-forming cells would combat osteoarthritis. A particular type of nerve cell may help sufferers from Parkinson's disease. Cells called oligodendrocytes may even help to repair the insulating sheaths of nerve cells in people with spinal injuries. Geron is also working on liver cells. In the first instance, these would be used not to treat people, but to test potential drugs for toxicity, because most drugs are broken down in the liver.

Such transplanted tissues might be seen as foreign by the immune system, but Geron is keeping its corporate fingers crossed that this can be dealt with. Embryos have ways of gulling immune systems to stop themselves being rejected by the womb. In case that does not work, though, the discussion has turned to the idea of transplanting adult nuclei into embryonic stem cells as a way of getting round the rejection problem. This idea, known in the trade as therapeutic cloning, has caused alarm bells to go off. The technique would create organs, not people, and no one yet knows whether it would work. But some countries are getting nervous about stem-cell research. This nervousness has not been calmed by the activities of Advanced Cell Technology, a firm based in Worcester, Massachusetts, which announced in November 2001 that it had managed the trick of transplanting adult nuclei into stem cells and persuading the result to divide a few times. In effect, ACT created the beginning of an embryo.

Last year President George Bush issued a decree restricting federal funding in America to existing embryonic stem-cell lines. Attempts are now being made in Congress to ban it altogether. Reversing the usual traffic flow, some American scientists have upped sticks and gone to Britain, where the regulations on such research are liberal and settled. Some countries, indeed, have more than just settled regulations. Singapore, for example, is actively recruiting people who want to work on the human aspects of biotechnology. China, too, is said to be interested. Cynics might regard this as opportunism. But not everyone's moral code is shaped by Judeo-Christian ethics—and besides, moral codes can change.

At the moment, cloning mammals is a hazardous business. It usually requires several hundred attempts to get a clone, and the resulting animal is frequently unhealthy, probably because the original transplanted nucleus has been inadequately reprogrammed. Nor does there seem to be much of a market, so no one is trying very hard.

Genetic modification is a different matter. GTC's drug-producing and Nexia's silk-producing goats are valuable, and people are putting in serious work on the technology. If someone wanted to add the odd gene or two to a human egg, they could probably do so. Indeed, something quite similar is already being done, although under another name: gene therapy intended to deal with illnesses such as cystic fibrosis is in fact a type of genetic modification, although admittedly one that is not passed from parent to offspring. But extending gene therapy to germ cells, to stop the disease being passed on, is under discussion.

...jokers to the right?

A scene in “Blade Runner”, a film that asks Shelleyesque questions about the nature of humanity, is set in the headquarters of a prosperous-looking biotechnology company. The firm makes “replicants”, robots that look like humans, and the firm's boss describes how they are grown from a single cell. The replicants, it is plain, are genetically modified people without any legal rights. In this dystopia, it is the unaltered humans who rule. By contrast, “GATTACA”, another movie set in a genetically modified future, has the modified in charge. They are beautiful, gifted and intelligent. It is those who remain untouched by modification who suffer.

All this is in the realm of fiction, but the contrasting views of the potential effects of genetic modification point to an important truth about any technology. What really matters is not what is possible, but what people make of those possibilities. In the fantasy worlds of science fiction, people are frequently dominated by the technology they have created, and made miserable as a result. Yet so far, the real technological future ushered in by the industrial revolution has defied the fantasists. Dystopia has failed to materialise.

Perhaps, one day, some tyrant will try to breed a race of replicant slaves, but it seems unlikely. It seems much safer to predict that the rich will attempt to buy themselves and their children genetic privileges if and when these become available. But there is nothing new in the rich trying to buy privileges. The antidote is not a Draconian ban on basic research, but reliance on the normal checks and balances, both legal and social, of a liberal society. These have worked in the past, and seem likely to work in the future.

Tyranny, by definition, is incompatible with liberalism. More subtly, the one near-universal feature of technologies in liberal societies is that in time popular ones get cheaper as market competition does its work. Personal genetic modification may start out aristocratic, but if it does turn out to be a good thing, it will become demotic. Conceivably, it may indeed prove to be the field's killer application. And perhaps it is a useful antidote to hysteria to point out that trite, fun applications—say, temporarily changing your

skin pigmentation—are conceivable, too.

Critics may say that decisions on cloning and germ-line modification are different, because they affect an unborn individual who has no say in the matter. But equivalent decisions about the unborn are routinely made already, albeit with the watchful eye of the law firmly on the decision-maker.

Even if people do not choose to alter themselves, though, biotechnology is likely to become ubiquitous. Its potential is too great to neglect. Its current woes will come to be seen as mere teething troubles. The first route to ubiquity is likely to be via the chemical industry. As people become more confident about manipulating enzymes and micro-organisms, ever larger swathes of industrial chemistry will fall into biotech's grip. Like existing chemistry, though, the results will be taken for granted almost instantly.

Health care will also be revolutionised by biotech: not merely through new drugs, but through the ability to deploy them precisely and to anticipate the need for their use from studies of an individual's haplotype. Medicine will become less of an art and more of a science. It may even become a consumer good, if drugs intended to let people operate beyond their natural capacities are developed. That, though, is another area fraught with moral difficulties.

What remains unclear is the extent to which bioengineered organisms will become products in their own right. The raspberry blown at GM crops, which are the only transgenic species on the market at the moment, does not encourage the idea that modified organisms will be welcomed with open arms. But captive, genetically modified micro-organisms, such as those that would run Dr Venter's putative solar-powered fuel cells, probably do have a big future.

Large organisms, too, may be exploited in ways as yet hard to imagine: furniture that is grown, rather than made; clothing that eats the dead skin its wearer sheds; miniature pet dragons (fire-breathing optional) as household pets. Whatever happens, however, it will be because somebody wants it to. Bacon was right. Knowledge is power—and generally a power for good. The century of Watson and Crick is just beginning.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Offer to readers

Mar 27th 2003
From The Economist print edition

Reprints

Reprints are available should you wish to order extra copies of the survey. Please send your request to the relevant region:

World-wide (excluding North America):

Rights and Syndication Department
26 Red Lion Square
London
WC1R 4HQ
United Kingdom

Tel: +44 (0)20 7576 8000
Fax: +44 (0)20 7576 8492
E-mail:rights@economist.com

North America:

Rights and Syndication Department
111 West 57th Street
New York
NY 10019
USA

Tel: +1 212 541 0532
Fax: +1 212 641 9808
E-mail:usrights@economist.com

Corporate offers and customised reprints

For corporate reprint orders of 500 or more and customisation options, please contact the Rights and Syndication Department in the relevant region:

World-wide (excluding North America):

Rights and Syndication Department
26 Red Lion Square
London
WC1R 4HQ
United Kingdom

Tel: +44 (0)20 7576 8000
Fax: +44 (0)20 7576 8492
E-mail:rights@economist.com

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com RESEARCH TOOLS SURVEYS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Sources

Mar 27th 2003
From The Economist print edition

In addition to those mentioned in the text, the author wishes to express his thanks to the following individuals: George Church of Harvard Medical School, Carl Feldbaum and Debbie Strickland of the Biotechnology Industry Organisation, and Vivek Jain of J.P. Morgan; and to the following companies: Affymetrix, Dyax, Favrille, GenProbe, Genzyme, Microbia, Pharsight, SurroMed and US Genomics.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Defence contractors

Military-industrial complexities

Mar 27th 2003
From The Economist print edition

AP

The defence industry will not be the biggest beneficiary from the war

AS WAR broke out on March 20th, a Boeing factory on the outskirts of St Louis, Missouri, landed a contract from the Department of Defence for an extra $690m-worth of JDAMs (Joint Direct Attack Munitions), the little $20,000 strap-on kits that turn ordinary bombs into satellite-guided weapons. A harbinger of things to come? Unlikely, because the order was, to be accurate, a coincidence. Boeing had already opened a new factory and doubled its capacity as the Pentagon fell in love with this weapon, made possible by GPS (Global Positioning System). Such orders take a long time to materialise.

Replacing all the munitions now banging over Baghdad falls short of a bonanza for traditional defence companies such as Lockheed Martin, Boeing, Raytheon and Northrop Grumman. The real money for them has always been in long-term contracts to produce weapons platforms, such as aircraft carriers and warplanes.

The lighter, more flexible military operation in this Gulf war marks a move away from massed warfare towards smarter, computerised fighting. The real lesson of Gulf war two might be that less (if digitally connected) is more. If this process (termed transformation by its leading advocate, Donald Rumsfeld, the defence secretary) develops, it could mean wrenching change for traditional contractors.

There is a further worry for the defence industry. Extra spending on war, such as the $62.6 billion that George Bush this week asked Congress to approve “urgently”, could lead to a budget crunch later. And that might, in turn, lead to cuts in future orders for warplanes, such as the F-22 and F-35 fighters. Mr Rumsfeld has already said that he will seek alternative savings. For instance, the American Air Force has 25% more bases than it needs. Nick Fothergill, defence analyst at Banc of America Securities, reckons that Mr Rumsfeld will turn surplus bases into industrial parks to cut costs, raise capital and protect weapons-procurement programmes.

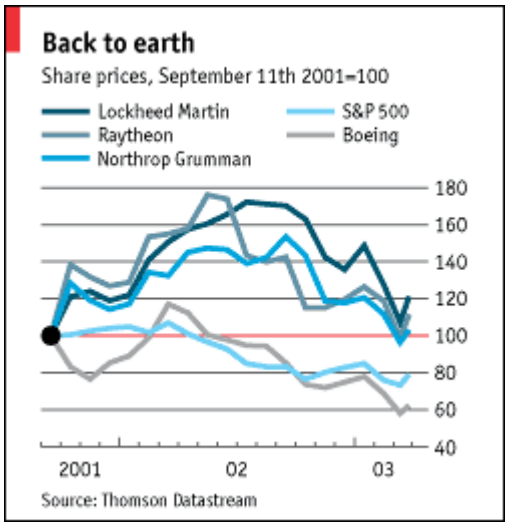
The Pentagon said this week that it will be seeking to replenish stocks of munitions that it has been using to pound Iraqi positions, from Tomahawk cruise missiles at about $600,000 a pop down to artillery shells. The American forces have already fired off more than 500 Tomahawks, about half the total shipped to the Gulf. But to put that in proportion, all of Raytheon's existing contracts to make or upgrade such missiles amount to only about $1 billion, out of total annual sales of around $70 billion. No defence contractor can survive by pinning all its hopes on only one or two weapons programmes. Typically, no single programme will account for more than a couple of percentage points of total sales.

Of the $62.6 billion supplementary budget, only $3.7 billion is to replace spent munitions, with a further $2.8 billion destined for other weapons procurement. According to Tassos Philippakos, aerospace analyst

at Moody's, a rating agency, the near-term impact for defence contractors is only “moderately positive”.

The biggest payout is the $30 billion that the Pentagon says it has spent transporting troops and hardware to the war (and that includes the return trip). Of this, extra personnel-related costs alone accounted for some $15 billion. Armies marching on their stomachs on the other side of the world cost more than boys in Biloxi boot camp. In the budget that the Pentagon put forward for this year, before war loomed in Iraq, about 40% of the total of $379 billion came under the heading of “operations and maintenance”. That means the cost of housing, feeding, fuelling, paying and administering the four armed services of America. By comparison, less than 20% was for new weapons procurement, the stuff that the defence industry *per se* produces.

A look at how the share prices of the traditional defence contractors have fared reflects this (see chart). Since the outbreak of the war, they have moved in line with the general market, following this week's decline of the S&P 500 index before rebounding. The reason the stockmarket takes such a cool view of defence shares in hot wars is that the army, navy or air force does not suddenly rush out and order more tanks, ships or warplanes just because it has to fight an enemy. These procurement programmes are spread over long lead times. The real boost to defence shares came in the wake of September 11th 2001, since that disaster alerted the world to a potentially more violent, bleaker future. Subsequently, the shares of Lockheed Martin, the highest climber among the defence stocks, rose by almost 80%.



Sending an army halfway round the world to fight a modern war is expensive, requiring everything from transport ships and aircraft to IT and logistics specialists to support an increasingly digital war. This is good business, but not for giant defence contractors. It is, rather, a boon to companies such as Halliburton, an oil-services firm formerly chaired by Vice-President Dick Cheney, and CSC DynCorp, which specialises in providing IT and housekeeping-support services (from canteens to garbage collection) for the government.

Since the first Gulf war, the number of American frontline troops has fallen by some 32%, as various auxiliary tasks have been outsourced to private contractors. CSC DynCorp, formed this month when Computer Sciences Corp bought the employee-owned DynCorp for about $1 billion, claims to be one of the Pentagon's top ten suppliers, because of IT and other support it provides at bases and in the Gulf. The Brookings Institution calculates that there are ten civil contracting staff for every 100 servicemen in the Middle East, a tenfold increase since the first Gulf war. In that respect, this is the first privatised war. It is the mercenaries in the kitchens who are making the real money.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com BUSINESS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Textiles

Clever stuff

Mar 27th 2003
From The Economist print edition

Can intelligent fabrics save the rich world's textile industry?

IT IS too late for the war in Iraq, but soldiers could soon be wearing the ultimate in battledress: smart combat suits. In May, MIT opens its “Institute for Soldier Nanotechnologies”—a dull moniker for perhaps the world's most expensive and fanciful experiment in fashion. MIT is leading an $80m five-year project, partly financed by the Pentagon, to develop fabrics that think. The dream is to make a uniform for future warriors that could neutralise chemical poisons, treat wounds, or hydrate soldiers in the desert by recycling body fluids.

Like a dedicated mobile hospital, these fabrics could monitor combatants' heart rates, keep their bodies nourished, deliver drugs, and relay their condition to headquarters. The clothes would repair and clean themselves, change shape in response to temperature, and even change colour for chameleon-like camouflage.

They would also be lighter. Today's soldiers lug around 100 lbs (45 kg), including communications equipment, limiting both speed and performance. In future, electrically conductive yarns could turn uniforms into featherweight communications systems, with keypads and monitors.

In fact, most of the technology needed to produce such clothes already exists. To date, however, most applications have been on the fringes—eg, pageable panties or T-shirts that change colour in bars and clubs. Surgeons have long worn footwear made of conductive material to guard against static sparks in oxygen-filled operating theatres. Outlast Technologies, based in Colorado, sells a parka with fibres interlaced with paraffin-filled microcapsules that capture and release the body heat of skiers in changing temperatures. And Japan has just exported Phiten, its chain of clever-clothing stores, to London, where it is selling sportswear made from titanium-coated fibres that apparently relax muscles and reduce cramp.

The greatest potential seems to lie in two areas: nanotechnology and making clothes conductive. Of course, “electric” clothes are not new. The first wearable electric jacket, sold by Levi Strauss at $1,000 each, flopped because it had little more than an array of crude and heavy wires sewn into the lining. Today's conductive fibres, coated in metals such as silver and nickel, are different. Incorporated into normal soft, washable fabrics, they could eventually transform our humble garbs into personal microprocessors.

Dedicated followers

High-fashion designers—from Ermenegildo Zegna to Paul Smith and DKNY—have already started to combine fashion with electronics. Sensatex, a New York company, will start selling its licensed SmartShirt commercially this year for $200. The shirt, now being tested by the Audi and Porsche racing-car teams, can record everything from respiration rates to a driver's precise location—information that can be relayed via wireless technology.

The strength of conductive fabrics is that they look and feel normal and are easy to care for. Weaving them is also easy. Christopher Pastore, professor of textile engineering at Philadelphia University, says: “The marvellous thing is you can make these fabrics on 200-year-old Jacquard looms.” The technology is also getting cheaper, as less expensive metals are used. Sauquoit, a Pennsylvania firm, makes a conductive yarn that is ten times finer than the equivalent from DuPont, the market leader, at a third of the price.

Metal-coated fibres, like ordinary ones, can be easily broken. Gorix, a company based in Yorkshire,

England, has found a novel way round this—by baking a derivative of an acrylic fibre in an oven with inert gases. The result is that the entire cloth becomes almost as conductive as metal and almost impossible to tear. Gorix has sold the technology to America's biggest diving-suit firm and several ski-boot companies, and is about to sign up one of the world's biggest medical suppliers. Harley Davidson may soon use patches of the material in leather jackets to warm bikers' kidneys and shoulders. Carmakers such as GM are considering Gorix's technology, not just as a better way to warm seats but, more cleverly, to identify passengers electronically so that the car “knows” whether to deploy an airbag in the event of a crash.

Robert Rix, Gorix's boss, warns about hyping smart textiles too much, pointing to a big practical problem: the batteries needed to power conductive clothing. “This is not a cheap technology,” he says. “There is no point trying to sell a heated glove for £9.99 ($15.70) and hiding the fact that the battery costs £49.” Retailers such as Marks & Spencer and Wal-Mart both like Gorix's fabric, but they cannot make it pay until battery technology improves.

Even so, intelligent fabrics hold out hope for western manufacturers. Although Europe and America can no longer compete with Asia on production costs, the introduction of technical, patented innovations gives the rich world's textiles industry a fresh chance. David Brookstein, dean of the textiles school at Philadelphia University, observes that “America and Europe's strength is in intellectual property. We can no longer manufacture textiles, but we can manufacture ideas.” In Germany, where the textiles industry has shrunk by a third in the past decade, so-called technical fabrics now account for 40% of total textiles output.

Warren Buffett, a famously savvy investor, also seems to think there is a future in smart textiles. In February, he made a $579m bid for the now-bankrupt Burlington Industries, once the world's biggest textiles company (he has since been outmanoeuvred by a rival). One of Burlington's few remaining assets is its 51% stake in a tiny firm called Nano-Tex, which employs nanotechnology to make clothes stain-resistant. Already bought by Gap, Land's End and Dockers, Nano-Tex uses whiskers measuring 10 nanometres long to bind fibres tightly enough to shrug off liquids. Burlington survived the 1930s depression by pioneering the use of rayon, the world's first man-made fibre. Seventy years later, smart man-made fabrics may yet save both it and an entire industry.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com BUSINESS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Television news

Embedded in Iraq

Mar 27th 2003
From The Economist print edition

The high cost of the war to the 24-hour news networks

THE first Gulf war made CNN, Ted Turner's pioneering 24-hour news network, a household name. This time round, CNN is but one of a dozen or so non-stop news channels—from the BBC and Fox News, to al-Jazeera and its newest rival, Dubai-based al-Arabiya. All-news networks not only face intense competition now; they are also in the middle of a severe media slump. Will this war make the networks, or break them?

There are certain fixed costs for any 24-hour news service, but the extra expense of covering the war is heavy. CNN, for instance, has about 250 staff in the Gulf region, about ten times its normal number. Not only do they need to be fed and sheltered; they also have to be supplied with video phones, satellite dishes, vehicles, security gear and so forth. Before the war began, CNN spent over $1m on security training. Now the running costs are piling up. It costs $1,500 a day merely to link a channel up to a geo-stationary satellite from a phone on the ground.

CNN is understood to be spending $1m a day covering the war, and to have put aside a $25m war-chest. “But it is clearly going to cost more than that,” comments one CNN insider. John Stack, vice-president of news-gathering at Fox News, which has just over 100 staff in the region, says his war budget runs into “tens of millions of dollars.” The BBC, which has over 200 people in the Gulf, feeding both its 24-hour news service in Britain and BBC World, its international channel which is running non-stop news, is said to have earmarked some £10m ($15m) for the war. Tom Wolzien, an analyst at Sanford Bernstein, estimates that the additional cost will run to roughly $40m-60m for the American news networks, about 10% of their annual news budgets—enough, in other words, to make a big dent in profits.

For the publicly financed BBC, these extra costs do not need to be set against forgone revenue. Nor do such worries appear to touch the Arabic-language satellite-news channels: al-Jazeera, for instance, is backed by the Emir of Qatar. For commercial operators, however, the war not only inflates costs but also squeezes revenues. Sky News, for instance, partly owned by Rupert Murdoch's News Corporation, stopped running advertising once the war began. Fox News ran no commercials for the first 60 hours. The American networks could be forgoing some $3m-7m a day in deferred and cancelled advertising.

The implication of all this is that some news networks may have to find ways to share costs. Last year, Disney's ABC News began merger talks with CNN, part of AOL Time Warner—though the talks were later called off. ABC had pared back its overseas news bureaus and was looking for further ways to cut news costs. As it is, ABC has a news-sharing arrangement with the BBC. Less surprisingly, News Corp's Fox News has been taking news feeds from its sister channel, Sky News. This quest for economies of scale could propel fresh merger talks in future.

For now, the news networks are less concerned by the cost of the war than by the kudos it brings. Supplying the ultimate form of reality-TV, shot by “embeds”—a noun invented by the Pentagon to refer to journalists travelling with soldiers—this war is zapped live into the living-room as no other. Despite the financial troubles of its parent, for example, CNN has had no trouble getting backing for its big-budget war coverage. “We face the prospect of spending a lot of money at a time when it's not going to pay back,” says Tony Maddox, in charge of CNN International for Europe, Africa and the Middle East. “But in the long run, there is a reward.”

At stake is the ability of the 24-hour news networks to entrench themselves in America as the news source of choice. If this happens, it will be in no small part due to the brash upstart Fox News, whose cheerleading coverage has continued to beat CNN in the ratings so far. Nobody is suggesting that, once the war-chests empty, 24-hour coverage will be scaled back. As Mr Wolzien puts it, for those who are

unsure: “This is, after all, what news networks are supposed to do.”

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com BUSINESS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Internet access

Hotspots and fries

Mar 27th 2003 | SAN FRANCISCO
From The Economist print edition

Coming to a McDonald's near you: wireless access to the internet

BEING wired is old hat. It's time to get unwired. So says Intel, the world's largest chipmaker, which has launched a new family of chips under the name “Centrino”. Its aim is to turn “Wi-Fi”, a way to gain access to the internet wirelessly, into a standard feature of portable computers. The launch was accompanied by a barrage of announcements from firms planning to charge for Wi-Fi access via “hotspots” in public places. Take your laptop to a hotspot and you can surf the net unplugged.

Toshiba and Accenture have announced plans to set up 10,000 hotspots in America. Cometa, a joint venture between Intel, IBM, AT&T and others, has already said it will build 20,000. A consortium of five Asian telecoms firms plans to build 20,000 hotspots across Asia by the end of the year, and similar moves are afoot in Europe. An hour's free Wi-Fi access is being thrown in with every meal at a handful of McDonald's hamburger restaurants.

Given the runaway success of Wi-Fi in offices, universities and homes over the past couple of years, these announcements have been surprisingly slow in coming. Gartner Dataquest, a market-research firm, estimates that 15m Wi-Fi adaptors for computers were sold worldwide last year, and 4.4m access points that can link computers within 50 metres or so to the internet. According to Jupiter, another market-research firm, 57% of American companies already use Wi-Fi, and another 22% plan to do so within the next year.

Yet travellers who open their laptops in airports or railway stations hoping for a Wi-Fi signal usually do so in vain. There are millions of private Wi-Fi access points, but there are hardly any public hotspots: a mere 3,400 in the United States at the end of last year, and about half that number in Europe, according to Gartner. It is only in the past couple of months that grand plans for thousands more have been set in motion. Why has it taken so long?

The commercial Wi-Fi market has had an unexpectedly slow start for a number of reasons, says Ross Pow of Analysys, a consultancy. The market is fragmented—there are hundreds of would-be commercial Wi-Fi operators in America alone—so hotels, restaurants and retailers have been deluged with offers from firms hoping to set up hotspots on their premises. Moreover, the business model is still unclear. Should a hotel group, say, try to set up hotspots by itself? Or should it go into partnership with a Wi-Fi operator?

Another difficulty, notes Glenn Fleishman, co-author of “The Wireless Networking Starter Kit”, is that there have already been several false starts. Wi-Fi access has only just become available at San Francisco airport, for example, which ought to have been one of the first places on earth to have a hotspot. But the airport twice signed agreements with flaky Wi-Fi operators that subsequently went bust.

Intel's strong backing for the technology is now prompting a shake-out. The company is investing $150m in Wi-Fi firms and plans to spend $300m promoting its Centrino chips. Through Cometa, it is seeding the market by building a network of Wi-Fi hotspots. As other firms enter the market on Intel's coat-tails, it seems likely that many smaller firms will either go out of business or be snapped up by larger ones. Last week, Cisco agreed to pay $500m for Linksys, a firm that makes Wi-Fi equipment for homes and small offices.

Cellular-network operators around the world are also moving into Wi-Fi, despite previous worries that doing so would muddy the prospects for “third-generation” mobile networks. Wi-Fi and 3G, they claim, can co-exist happily. The established operators' interest in Wi-Fi is annoying enthusiasts, however. They had hoped that the technology would upset the status quo in telecoms, just as the internet did a decade ago.

Last year, there were several attempts to build commercial Wi-Fi networks from the bottom up, by aggregating private hotspots in homes and offices and offering their owners a share of the proceeds from paying users. But this idea failed: its best-known proponent, Joltage, closed its doors last month. Such outfits, says Larry Brilliant, Cometa's founder, were unable to provide the guaranteed levels of service that business customers expect. Instead, like the internet before it, Wi-Fi is now moving from the realm of grassroots enthusiasts to that of the big computing and telecoms companies.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com BUSINESS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

European carmakers

Heading east

Mar 27th 2003 | WARSAW
From The Economist print edition

How long can eastern Europe keep enticing western Europe's carmakers?

TRNAVA, a tiny town in western Slovakia, is the new face of European car manufacturing. In January, France's PSA Peugeot Citroën chose it as the site for a new *euro*700m ($745m) assembly plant that will start turning out 300,000 passenger cars a year in 2006. The French company's investment comes on the heels of a joint venture with Japan's Toyota to build a *euro*1.5 billion plant in the Czech Republic. Meanwhile, Britain's MG Rover is poised to make a big investment in Poland; and Renault is preparing to launch a new budget model at its factory in Romania.

The appeal of central Europe is obvious: cheaper labour costs (roughly one-fifth of those in the European Union); good infrastructure; and a prized location at the heart of a soon-to-be enlarged EU. Gone are the days when poorer EU members, such as Spain and Portugal, could lure foreign carmakers with lower wages and hefty grants for underdeveloped regions. When Germany's Volkswagen announced last year that it was axing jobs in Spain and shifting part of its production to Bratislava, it confirmed that southern Europe's competitive edge in the car industry had been blunted. Louis Schweitzer, chairman of Renault, thinks that Toyota's factory in northern France, opened in 2001, will be “the last large car plant in western Europe”.

Peugeot's boss, Jean-Martin Folz, is not only opening factories in eastern Europe; he is also hoping for growth in the market there in the longer term. For now, though, new car sales in central Europe are a small fraction of those in the EU. Global Insight, a research group, expects sales among today's EU accession candidates to double by 2012, but they will still amount to only 13.4% of west European sales.

The investment rush is being encouraged by the fact that central European countries will no longer be able to offer investors such generous tax breaks once they join the EU in 2004—which is why they are pulling out all the stops to win new investment now. The Czechs, who boast the region's highest foreign direct investment per head, win praise from multinationals for setting up CzechInvest, an inward investment agency that cuts through the bureaucratic rules that can stymie deals. Poland, the runner-up for Peugeot's two central European sites, has seen its star wane due to weaker investment incentives and heavier tax and administrative burdens. “We could do with a PolishInvest,” says Wojciech Drzewiecki, head of Samar, a Warsaw-based automotive consultancy.

Robust growth would also help. Sales of new cars in Poland have fallen by 60% in the past three years, as the economy has faltered. That has dashed hopes among local producers of a central European car boom, so putting a premium on exports to western Europe. Yet with currencies in the region strong in anticipation of EU membership, exports are being hit hard. Another concern is post-accession wage pressures. Trade unions at Renault's plant in Romania have just won a 17% pay rise after going on strike for four days. Not a good omen some four years before Romania is due to join the EU. The French carmaker's new model there may not be such a budget version after all.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Express-delivery firms

A package with strings attached

Mar 27th 2003 | NEW YORK
From The Economist print edition

Efforts to block DHL's return to its homeland

FOUNDED in 1969 by three free-spirited Americans, the delivery firm DHL is readying itself for a big push back into the land of its birth. But its present owner—Germany's post office, no less—is proving a handicap. No sooner had Deutsche Post, DHL's parent, announced a $1 billion deal this week to acquire bits of Airborne, a smaller American express-delivery firm, than FedEx, UPS and other rivals were lobbying to get the deal blocked. They argue that Deutsche Post already violates laws requiring that domestic airlines be controlled by American citizens.

Deliver us from FedEx and UPS

Seeking to protect their home market, most of which they have carved up between themselves, FedEx and UPS have been agitating unsuccessfully to get Deutsche Post's airline affiliate, called DHL Airways, thrown out of America ever since the German company bought a majority stake in DHL three years ago. But war and recession have darkened the country's mood. The Department of Transportation (DOT), which regulates the airline business, is under pressure to take another look at DHL Airways' citizenship. Rick Paterson, an analyst at UBS Warburg, a Swiss bank, gives the Airborne purchase only an even chance of getting past the regulators.

Under the terms of the deal, Deutsche Post will buy only Airborne's ground operations; its airline unit will be spun off as a stand-alone business. Deutsche Post will then draw up a contract with this new airline to handle business in America. This not only satisfies the ownership rules, maintains Uwe Doerken, DHL's chief executive, but also fits with DHL's broader strategy of contracting out its airline work.

Combined, he says, the new operation would have 21% of the overnight delivery market inside America, and 23% of the market in deliveries into and out of the country. In the ground delivery business, where UPS has 70% of the market, DHL would have just a 2% share. But it says that weak competition and fat margins make it an easier business to enter.

The Airborne arrangements ought to satisfy one of the worries raised by Kenneth Mead, the DOT's inspector-general, about DHL Airways. Deutsche Post sold a controlling stake in its airline to William Robinson, an American citizen who had been a big shareholder in DHL's international operations. Mr Robinson installed his attorney, his brother and his financial adviser on the four-man board, further satisfying the letter of the law. But Mr Mead seems to be worried that DHL and Mr Robinson have entered into arrangements—formal or informal—that cede actual control of the airline to the Germans. The Airborne deal seems to be free of such complicating personal relationships.

Mr Mead's second worry is more pertinent. This is that the contract between DHL and DHL Airways gives the Germans effective control by making DHL Airways a captive vendor. Mr Mead notes that 90% of DHL Airways' business is with DHL, a figure that he says appears not to have changed since the DOT got DHL Airways to hire a marketing executive to drum up more outside business. Mr Mead also notes that DHL guarantees DHL Airways' debts and picks up its operating costs, the sort of contract that it will want to have with Airborne's spun-off airline. FedEx and UPS both support Mr Mead's recommendation that the DOT put its decision on DHL Airways to a judicial review by independent government lawyers.

Mr Doerken says that the type of contract between DHL and DHL Airways is “standard industry practice”; DHL Airways maintains that the DOT has already thoroughly investigated all the issues that Mr Mead raises. DHL Airways also says that, contrary to Mr Mead's assertions, it has drummed up new third-party business, including military contracts that have helped it to play a “significant role in advancing US national security and military objectives as our nation approaches military conflict with Iraq.”

DHL Airways says that its competitors are trying to harass it, and to gain access to business information that would otherwise remain secret. Up to now, these arguments have enjoyed the support of Norman Mineta, the transport secretary, who has taken a relaxed approach to DHL Airways' citizenship requirements. German businessmen, terrified that souring diplomatic relations could incite a business backlash, will be watching future progress with concern.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economist.com BUSINESS
PRINTABLE PAGE VIEW SPONSORED BY
About sponsorship

Face value

The communist entrepreneur

Mar 27th 2003
From The Economist print edition

Yin Mingshan shows how to make profits and political friends in China

Get article background

YIN MINGSHAN is a Chinese tightrope walker. One of a new breed of successful entrepreneurs, he balances commercial ambition with astute reading of the political tea-leaves. At an early age, he learnt the dangers of being politically incorrect in China. In 1958 he was expelled from high school for “rightist utterances” (he is still not sure what he said wrong), and three years later he was jailed for nine months for having “capitalist inclinations”. For nearly 20 years, Mr Yin was labelled a counter-revolutionary and assigned menial tasks in a factory. Today, at 65, he is one of China's wealthiest private entrepreneurs, with more than 5,000 workers on his payroll. But he is also careful to curry favour with the Communist Party. Last year, indeed, he told party officials that he wanted to join it.

His move could not have been more opportune. The party is trying to win favour with private businessmen. In January, it approved Mr Yin's appointment as deputy chairman of an advisory body to the government of Chongqing municipality, where his company, Chongqing Lifan Industry Group, is based. Mr Yin was the first private businessman in China to be awarded such a high position. It was an extraordinary achievement for a man who launched his business only in 1992, with capital of $36,000 and nine staff. His was then one of a number of small-time privately run motorcycle and motorcycle-component producers that had sprung up in response to soaring demand that the sluggish state-owned factories were unable to fulfil. Mr Yin's pursuit of new technologies and export markets quickly turned his firm into one of the city's giants—and a big contributor to the government's coffers. Last year it paid $15m in taxes.

Mr Yin owes his success as much to his political tact as to his business skills. One official magazine called his political abilities “the acme of perfection”. Mr Yin says he is still in discussions with the party about membership. Since 2001, the party—in belated recognition of the importance of private enterprise to the country's economic growth—has eased its ban on recruiting “exploiters”, as party theoreticians until recently still sometimes described the owners of private businesses.

Mr Yin is rare among private entrepreneurs in China in his prominent advocacy of policy changes that could make it easier for the private sector to develop. For all China's embrace of free-marketry, private businessmen still suffer discrimination. Getting a loan from a state-owned bank, for example, is extremely hard. Securing a listing on one of China's two stock exchanges (almost the exclusive preserve of state-controlled enterprises) is next to impossible. One of Mr Yin's ambitions is for the private sector to be allowed to operate banks. This, he argues, would promote the development of institutions that could cater more effectively to the needs of small and medium-sized enterprises than can the big four state-owned giants or the similarly bad-debt-laden city commercial banks (of which there are 111).

His motives are not entirely altruistic. The Lifan Group has joined 15 other big private enterprises in Chongqing in setting up what they call a “study group” looking into the establishment of their own private bank in the city. Mr Yin argues that, since China is allowing foreign banks to expand in accordance with the pledges it made when it joined the World Trade Organisation in 2001, it ought to give domestic non-state investors the same privileges. “We often say that foreign investment is like a son-in-law: it's no good acquiring one if it makes your son walk off in anger,” he says.

Mr Yin has chosen the right moment to make his case. At its 16th congress last November, the party promised to give private capital greater freedom to invest in hitherto restricted areas. Officials say all areas open to foreign capital will be open to domestic private capital—but they don't say exactly when. The Lifan Group would particularly welcome new opportunities. Competition in motorcycles has become intense, and profit margins are falling. The group has a big share of the export market to Vietnam, but

there too it faces rapidly growing competition and vicious price wars. It needs to diversify.

The group already has interests in winemaking, mineral water, sports shoes and even a top-ranking football team, Chongqing Lifan. Mr Yin wants to move into the car industry, which is enjoying rapid growth (but is also very crowded). But his top priority is financial services, which he wants to place at the summit of what he calls the “Lifan pyramid”. He thinks the government could approve the formation of several private banks this year. Officially, China has only one at present, the Minsheng Bank, an organisation with strong links to the government.

Painfully slow progress

Optimists argue that the entry of entrepreneurs such as Mr Yin into the Communist Party's inner circle will give the private sector a more powerful voice in policymaking. Perhaps so in the long term, but progress is painfully slow. (Mr Yin's new position may sound impressive, but it carries no real power.) In the case of banking, despite the powerful arguments of Mr Yin and others, the government is a lot keener on promoting private investment in existing state-owned banks than on setting up a new array of competitors.

Experiments with private banking are therefore likely to be slow. As Mr Yin points out, if citizens are still ready to pour their savings into technically insolvent state-owned banks, they would do so more eagerly into private banks (believing the government would stand behind them)—hardly a recipe for prudent management. So even Mr Yin, who is ever sensitive to the official mood, urges caution. “We should have them, but not too many at once. Those who fulfil the conditions should be allowed to go first,” he says. His political nous should help to put Lifan near the front of the queue.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

World trade

The Doha squabble

Mar 27th 2003 | GENEVA AND WASHINGTON, DC
From The Economist print edition

A failure to liberalise farm trade threatens the entire Doha round of trade talks

Get article background

THE outlook for the already troubled Doha round of multilateral trade talks will darken considerably on March 31st. That was the deadline set by world trade ministers, when they launched the Doha round in November 2001, for agreement on the scope of talks for freeing up trade in agriculture. It is a deadline that is now certain to be missed.

Deadlines are always missed in trade negotiations. But this time the stakes are unusually high. For a start, agriculture is not the only issue on which the timetable has slipped. The Doha agenda promised an agreement by the end of 2002 on getting poor countries access to cheap generic drugs to fight AIDS and other scourges. All countries bar the United States duly agreed on a formula in December; but, because changes to world trade rules must be agreed unanimously, the deadline was missed. Trade ministers are also squabbling over altering existing trade agreements to help poor countries, which they also promised to do by the end of 2002.

Moreover, farm trade is not some peripheral issue: it is central to the whole round. Doha was launched with much fanfare about its being a “development round”. Many developing countries felt they got a raw deal from the Uruguay round. They were dragged reluctantly into yet another set of trade negotiations largely by the promise of freer trade in farm goods. Lower tariff barriers and a big chop in the $300 billion-plus of subsidies that rich countries lavish on their farmers every year would give a big boost to many poor countries. Given the stakes involved, it is hardly surprising that those countries do not take kindly to delay. As Supachai Panitchpakdi, director-general of the World Trade Organisation (WTO), puts it, “the sense of frustration is growing.”

This frustration could spill over into other areas of negotiation, including services, more cuts in tariffs on industrial goods, and a revision of rules on anti-dumping. In all these areas, most countries will stall until they see progress in agriculture. March 31st is also the date by which countries are meant to table offers for which services they intend to free up, and by how much. There are murmurs in Geneva that some countries are now scaling back their offers. Robert Zoellick, America's top trade man, recently implied that America's willingness to make concessions on anti-dumping, which will be politically tough to sell to Congress, depends on progress in the farm talks.

The agricultural impasse must be cleared if the round is to succeed. But how? The problem harks back to Doha itself. The WTO's members agreed then to make “substantial improvements in market access” (ie, reductions in tariffs), “reductions of, with a view to phasing out, all forms of export subsidies”, and “substantial reductions in trade-distorting domestic support”. But what constitutes “substantial”, and how do you measure it? The weasel words of the Doha declaration papered over big differences between

farm-subsidising rich countries and farm exporters.

Farm corners

In one corner stands the Cairns group of agricultural exporters (including Canada, Australia and Brazil), plus the Americans. Although there are differences among them, this group wants an ambitious outcome, including the scrapping of export subsidies and big cuts in trade-distorting domestic subsidies and tariffs. The Americans want to phase out export subsidies over five years, to cut subsidies to 5% of the value of farm production and to slash tariffs to no more than 25%.

These radical plans admittedly stand in stark contrast to the American farm bill signed by George Bush last year, which dramatically increased farm subsidies. What this shows, argues Mr Zoellick, is that America is ready to dismantle subsidies—but only if the playing-field is level. And this implies that countries with higher tariffs and subsidies must cut them by more than those with less support.

In the other corner stand countries that lavish most support on their farmers: the European Union, in particular, but also Switzerland, Norway, Japan and South Korea. These countries take a different view of what “substantial” implies. The EU rejects the idea that export subsidies should be abolished (it talks about a 45% cut). Its definition of “substantial” is a 55% reduction in trade-distorting subsidies and a 36% cut in tariffs. And it adamantly opposes the idea that those with higher tariffs and bigger subsidies should cut more, suggesting instead that all countries should cut average tariffs by the same amount.

The EU also wants the agriculture negotiations to cover a whole set of other areas, from food safety and labelling to rules that protect the names of products from specific geographic regions, such as feta cheese or calamata olives. Such “non-trade” issues infuriate farm-exporting countries, which think the EU is trying to redefine the agenda to its advantage.

Stuart Harbinson, chairman of the WTO's agriculture negotiating committee, has been trying to forge a compromise by taking elements from both corners. But his first effort, released in February, was roundly criticised: Washington decried its “low level of ambition”, Brussels complained that it was “unbalanced”. His second, marginally revised text was little more popular.

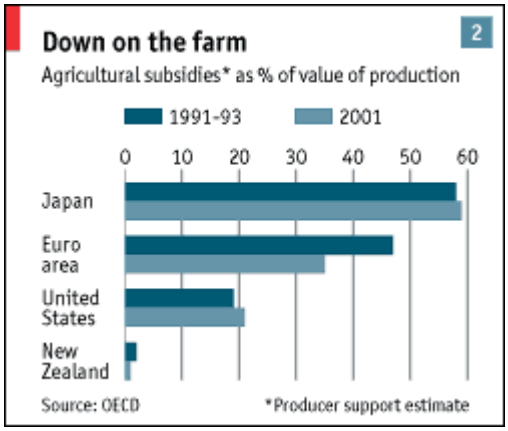
Blame Mr Chirac

For the most part, the European Union is roundly blamed for this mess (Japan and other farm protectionists are expected to follow Europe's lead). The underlying reason is Europe's failure to agree on radical changes to its common agricultural policy (CAP). In the absence of any political agreement on whether and how soon to reform the CAP, trade negotiators from Brussels have little room for manoeuvre.

Franz Fischler, the EU's agriculture commissioner, has made ambitious proposals to decouple subsidies paid to Europe's farmers from their production. In principle, this would reduce the EU's use of trade-distorting subsidies, as well as its reliance on export subsidies. But several EU members, particularly France and the Mediterranean countries, view Mr Fischler's plans with deep suspicion.

Worse, a deal between France's Jacques Chirac and Germany's Gerhard Schröder last year promised to keep CAP spending broadly unchanged until 2013. Although this will mean a cut in real terms, the French interpret it as putting off meaningful CAP reform. Conventional wisdom had long held that the EU would be forced to reform the CAP to cope with its expansion to include such countries as Poland, with its huge number of farmers. Yet the Chirac/Schröder deal appears to push reform far beyond the Doha

timetable.



Another pressure-point might come from Europe's ambitions to be a friend of poor countries. Last month, when he was drumming up opposition to war with Iraq, Mr Chirac acknowledged for the first time that export subsidies harmed poor countries in Africa. He suggested a moratorium on their use—surprising for a man who cut his teeth as French farm minister. Next day, normal service resumed: he argued that there was no need to reform the CAP.

Europe's intransigence aside, the issue of how to help poor countries raises more problems for farm negotiations. Those with preferential access to rich-country markets, mainly in Africa and the Caribbean, are keen to keep that advantage. Yet these preferences are anathema to more efficient developing-country exporters, such as Argentina. And other poor countries are against complete farm liberalisation. India, for instance, is deeply worried that cutting tariffs on agricultural goods might ruin its rural economy.

Cut to Cancun

The final deadline for dealing with all these issues has now become the next gathering of world trade ministers at Cancun in September. “We seem to be rolling a snowball of unresolved issues towards Cancun,” is how one trade negotiator puts it. And that, as many officials acknowledge privately, means that the original Doha deadline of finishing the round by January 2005 is, in effect, defunct. Instead, ministers will have to choose between finishing a less ambitious agenda on time, or extending the timetable.

Those who argue that a slimmed-down Doha round is plausible point out that Pascal Lamy, the EU's trade commissioner, has a good reason to get something by the end of next year, when his term as commissioner ends. Since Mr Lamy is a French socialist, Mr Chirac may be reluctant to reappoint him as France's lone commissioner. But the odds of a mini-deal with scant progress on farm trade are minimal. For most countries, agriculture is simply too important to leave aside.

Delay is therefore far more likely. Although nobody yet talks of it publicly, one popular revised deadline is 2007, the year that Mr Bush's fast-track negotiating authority expires. But delay brings big risks of its own, especially since the negotiations are so badly stalled. A particular concern is that momentum could shift elsewhere. The United States is working on a Free-Trade Area of the Americas as well as a slew of bilateral deals. The EU is pursuing its own regional deals. Bilateral free-trade agreements are springing up all over Asia. Officials in Geneva worry that these are sapping energy from the Doha round. The benefits of a multilateral trade deal are vastly superior to those of a patchwork of bilateral and regional agreements.

A second risk is of more trade disputes. Agriculture itself could throw up several. In recent years trade disputes over farm products have been put on hold under a “peace clause” negotiated during the Uruguay round. That clause expires on December 31st. If the peace clause expires and the Doha round is stalled, big exporters, such as Brazil, may resort to litigation.

If Doha goes nowhere, several simmering bilateral disputes between America and Europe could also boil up again. The biggest is the foreign-sales corporation tax. Brussels has won the right to impose up to $4 billion-worth of tariffs in retaliation for America's failure to get rid of this tax provision, which the WTO has ruled illegal. There may be fights over American steel tariffs, which the WTO is preparing to rule against. And Washington is mumbling about launching a WTO complaint over Europe's refusal to import genetically modified crops. Both sides have an incentive to be patient and amenable to compromise—but only if Doha remains on track.

The lesson from the launch of the Doha round is that geopolitical stress, paradoxically, can boost trade rounds. In the summer of 2001, the prospects of launching a new trade round were dim, with huge divisions about what the Doha agenda should cover. The terrorist attacks of September 11th changed all that. Doha became a symbol of unity in the war against terrorism.

Today, progress in the trade talks could, once again, be a unifier. It could be a sign that the geopolitical strains in the transatlantic relationship have not polluted the economic sphere. Alternatively, in the

aftermath of Iraq, the key negotiators may be even less willing to compromise.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Bank regulation

Basel brush

Mar 27th 2003
From The Economist print edition

American unilateralism over bank capital rules is upsetting Europeans

FOR the past five years, the world's financial regulators have been working on a new set of rules for bank capital, called Basel 2. The idea is to ensure that banks' capital matches the risks they carry: the riskier their loan books, the more capital they should hold. The rules are not due to be applied until January 2007, but if that deadline is to be met, Basel 2 must be practically set in stone by this May.

The Basel Committee on Banking Supervision, which is drawing up the rules, is pleased with the results of its third (and supposedly last) impact study. The study suggests that the complex new risk weightings to be applied to different types of asset will produce appropriate levels of capital for most of the world's banks.

Getting this far has taken a lot of sweat and horse-trading. American bankers and regulators have been at the forefront. American financial institutions have debated the rule changes as keenly as anybody. And Bill McDonough, head of the Federal Reserve Bank of New York, has cracked the whip as chairman of the Basel committee.

Imagine, therefore, the consternation of other committee members on learning how America plans to treat the new rulebook. Some American bankers and legislators are arguing that the proposed capital charge for operational risk—a fundamental part of Basel 2—needs to be completely rethought. Worse, American regulators intend to apply the new rules to fewer than a dozen of their banks. At a congressional hearing last month, they made it clear that the thousands of other American banks would continue to use the less complex existing rulebook, Basel 1. In fact, Basel 1 is little different from the lowest of Basel 2's three grades of sophistication. Nevertheless, the regulators believe that even this slight change would be a waste of money for America's smaller banks.

Another transatlantic tiff

This is a choker for European regulators, who see Basel 2, like Basel 1, as a global standard to be applied to all banks. Granted, the Federal Reserve has always said that it would apply Basel 2 only to “internationally active” banks. The surprise is that this means so few. It seems that banks as big as State Street, Mellon Financial Corporation, and perhaps even Bank of New York, which all have huge international payments and securities operations, will escape. State Street and Mellon have been

lobbying hard, arguing that the Basel 2 charge for operational risk is too formulaic. They say that operational risk—the risk of loss from systems failures, external events, fraud etc—is impossible to quantify. It would be better if supervisors monitored banks' efforts to mitigate these risks and then set a subjective capital charge. But this is anathema to European regulators.

In Europe, a version of Basel 2 is to be incorporated into European Union law and applied to all banks and investment firms, not just internationally active banks. To this end, the European Commission hopes to publish a draft directive in June. No wonder rulemakers in both Basel and Brussels are furious with the Americans.

As things now look, different standards will apply to American and European banks, giving the Americans a theoretically lower cost of making loans. Karen Petrou of Federal Financial Analytics in Washington fears that the American regulators' narrow application will allow some quite big American banks to side-step realistic capital charges, by using the old Basel 1 loopholes. “The whole point of Basel 2 is to get rid of regulatory arbitrage,” she comments.

However, members of the European Parliament (MEPs) might also try to reshape the new rules—just as American congressmen have already tried. Alexander Radwan, a German MEP who will report to the parliament on Basel 2, has several concerns. He thinks that capital charges that are more sensitive to credit risk could curb lending to small companies, a fear previously expressed also by the German government. And he dislikes the idea of bank-supervision rules being drawn up and amended by unelected experts (such as the Basel committee) outside the purview of politicians.

The Europeans also have some bargaining chips, which may yet produce a compromise with the Americans. American banks cannot operate in Europe under non-EU capital rules or supervision unless these are judged to be of “equivalent” standard. American banks may find that Basel 1 will not be deemed equivalent within the EU after 2006, when the commission's promised directive is due to take effect. Moreover, some American investment banks may be caught by another EU directive on financial conglomerates, which comes into force in 2005. They may have to seek out a consolidated supervisor with stronger oversight than their current one, the Securities and Exchange Commission: an EU committee will decide next year.

Alternatively, European regulators could follow the American lead, and simply reduce the scope of Basel 2 in Europe, along American lines. That might not be a bad outcome. Initially, a few big banks conforming to Basel 2 would set a standard to which other banks could aspire. The incentive to aspire would come not from regulatory pressure but from the market, which might judge compliant banks to be safer and better-run.

Nice, but improbable. So much effort has been put into Basel 2, and so many European banks are braced for the future directive, that there is no turning back now. So it looks more likely that American and European banks and their regulators will end up playing by different rules.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Markets and war

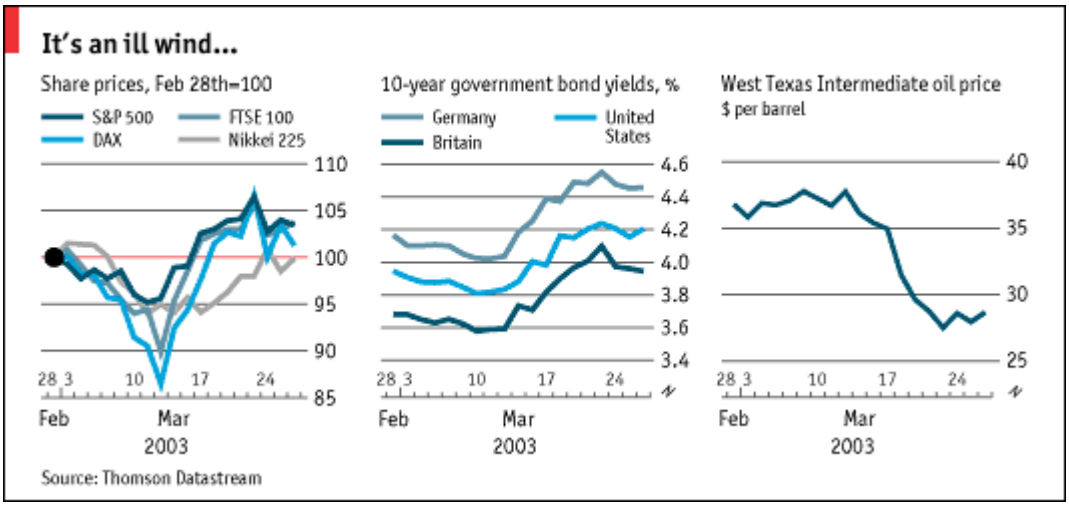
Gun-shy

Mar 27th 2003
From The Economist print edition

Formerly hawkish traders take cover, as war's reality sinks in

AS COALITION troops headed towards Baghdad, they found the going harder than some pundits had expected. Stockmarkets responded by beating a hasty retreat from their exuberance in the week before war began. Punters seemed to realise that their early, eager assessments of the war's outcome—stockmarkets saw double-digit gains in the week leading up to the opening shot—needed tempering.

At the end of the first week of war, the S&P 500 was 2.9% below its high on March 21st and the FTSE 100 was down by 1.8%. Continental European bourses, which had bounced even higher than those in the belligerent countries, also suffered more in the fall. Last week's stunning rise is said to have wrong-footed some hedge funds with short positions; the quick about-turn may well have caught them for a second time. After all these gyrations, by March 26th most stockmarkets were a little stronger than they had been at the end of February (see chart).



Such manic swings are to be expected in wartime, especially in equity markets. Some economists have recently made much of financial markets' uncanny mimicry of human psychology, especially adolescent mood swings. Recent weeks have provided fine evidence of such violent under- and over-shooting, especially if Donald Rumsfeld is right to aver that, owing to America's overwhelming force, the ultimate outcome of the war against Iraq is not in doubt.

Government debt has had an equally dizzying ride since the start of March. After yields fell to four-decade lows, government bonds sold off a bit, but now seem to be sought after once more. In the oil markets, talk has swung from worries over shortages, to fears of a glut, as prices have fallen to their lowest this year.

Emerging markets are being closely watched to see if Turkey's problems might spark contagion. The country has suffered since it refused America use of its bases for a land assault on Iraq. In recent days, Turkey's government debt has rebounded as spreads over American Treasuries have tightened, because hopes of an American aid package have revived.

If one cannot be sure which way asset prices will move, only that they will move around a lot, there is still money to be made. Volatility measures, especially intra-day variations in share prices, have been hitting new highs. This has been a boon for options traders. They have had a fine time trading in

volatility in recent weeks, which some see as close to printing money. But the appeal of such bets may be diminishing, as the markets now expect less pronounced swings ahead.

With all markets so beholden to the fate of one man, Saddam Hussein, how useful it would be to be able to hedge against his fate directly. Fortunately, financial innovators such as TradeSports and NewsFutures already offer contracts that pay you for correctly guessing whether Mr Hussein will still be the leader of Iraq on a specific date. These, pity for the coalition, have fallen in price in recent days by a few percentage points. At TradeSports the contracts now point to a 17% chance of his demise (or, at least, loss of power) by the end of March, 77% by the end of April and 92% by the end of June.

Economists from Harvard and Stanford Universities recently used such securities to gauge the war's likely effects on the markets. They think the war is likely to trim equity prices by 15%, a destruction in America alone of $1.1 trillion dollars in wealth. Their outlook for oil prices is a bit more optimistic, suggesting stable prices at pre-war levels in the months after the war.

Of course, many hope that the bets on Saddam's demise will pay off soon. But even if the war is a success, there is much less in the world economy to be optimistic about. The American economy is beset by worries that weak manufacturing will start shrinking again, and the travails of service industries such as the airlines and retailing will worsen. Despite all the references to the last Gulf war, nobody expects history to repeat itself exactly. Valuations are, by most historical standards, far above 1991 levels. Whatever Saddam's fate, shares will not find it easy coming home from this war.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Italian finance

Generali finale?

Mar 27th 2003
From The Economist print edition

A battle over Italy's biggest insurer has almost reached a surprising conclusion

IN BRITAIN, the name Profumo will forever be associated with a 1960s cabinet minister who resigned after talking too much to a pretty prostitute. Now Italy is in the midst of its own Profumo affair, but it is unfolding in the world of high finance; there is no sex involved; and this time nobody called Profumo will be doing the resigning. At the heart of the matter is Alessandro Profumo, boss of UniCredito, Italy's second-biggest bank and by many lights its best-run. Although last-minute wrangling could yet derail a deal, the affair should soon end with a broad agreement to reshape two of Italy's most powerful financial institutions.

Profumo should soon be smiling

Mr Profumo made headlines in early March, when he revealed that UniCredito had bought a 2% stake in Generali, Italy's biggest insurer (and Europe's, by market capitalisation). He said that he wanted to protect Generali's “national identity”, an extraordinary assertion that he quickly came to regret. Mr Profumo's real (and obvious) motive was to oust Vincenzo Maranghi, chief executive of Mediobanca, a powerful Milanese investment bank.

The end of the affair

Mediobanca has long used its 13.6% stake in Generali to control the insurer, installing three chairmen in recent years and generally making a nuisance of itself. If he could grab control of Generali, Mr Profumo would have a strong platform for an all-out assault on Mr Maranghi. Aided and abetted by Antonio Fazio, governor of Italy's central bank, Mr Profumo put together a group of banks to buy Generali shares.

The battle proved swift, thanks to two factors. One was the frustration felt by the Italian treasury at the affair's messiness. It quietly warned banks that it might step in: that got them moving. The other was Vincent Bolloré, a French businessman. He and his allies control roughly 20% of Mediobanca. They fear that the investment bank's value might be wrecked by continued squabbling and uncertainty. Mr Bolloré made it clear to the group of banks around UniCredito that he wanted to stabilise Mediobanca by sorting out the Generali mess quickly. Suddenly, it was in everyone's interests to look for a solution.

Its broad outlines are that Mr Maranghi will go, either soon or in October when his present term ends. Mediobanca's chairman, Francesco Cingano, is frail and will also be replaced. Shareholders in Mediobanca (the UniCredito group holds around 15%) will make an agreement: a new management team will, in effect, be restrained from using Mediobanca's investments, such as the stake in Generali, as a means of control over corporate Italy.

And what of Generali? Mr Profumo initially said that the insurer's top management would have to go, but he has now changed his tune. Antoine Bernheim and Giovanni Perissinotto, respectively chairman and managing director of Generali, are pushing for three-year contracts to replace their current one-year terms.

Mr Profumo also says he is not a long-term investor in Generali and intends to reduce his stake once Mediobanca is sorted out. If true, that is potentially good news for the insurer. But some members of the UniCredito camp would like to sell their expensively acquired Generali shares—to none other than Mediobanca, raising its stake to around 20%. That would be disastrous for Generali.

It all looks like a victory for Mr Profumo. But hang on. His reputation as a champion of shareholder value has been damaged by his becoming embroiled in power politics. He claims, unconvincingly, that he has acted in the interests of a better-functioning Italian capital market; yet the affair has been a thoroughly traditional back-room one. Will Mr Profumo really step back from Generali once Mediobanca has been reformed? Or might it all depend on who becomes Mediobanca's new boss? Although Italy's Profumo affair is almost over, there is still plenty of scope for further intrigue.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Japan's post office

Leviathan unbound

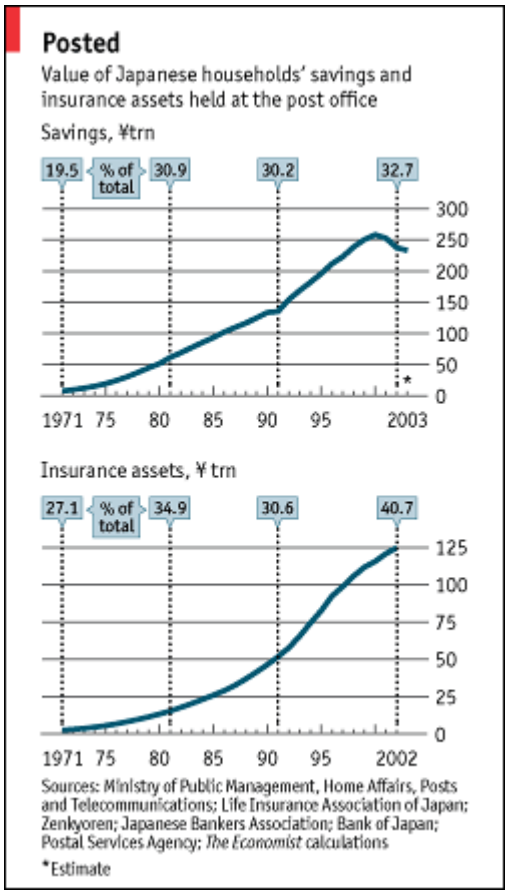
Mar 27th 2003 | TOKYO
From The Economist print edition

A new name—and new freedom—for Japan's giant post office

Get article background

WHEN Junichiro Koizumi was first noticed in Japanese politics, among his wilder ideas was the privatisation of his country's post office. As prime minister, Mr Koizumi has not gone quite that far. But on April 1st, the post office will be reborn as Japan Post, still a public entity but no longer controlled by the Ministry of Public Management, Home Affairs, Posts and Telecommunications (MPHPT). The mammoth institution, which sells three main products—postal services, savings and insurance—is supposed to become a leaner, profit-seeking operation.

For Japan's beleaguered banks and life insurers, this is scary. The post office is the world's largest financial institution. In its savings accounts, Japanese households have ¥235 trillion ($2 trillion), one-third of such deposits. Its life-insurance funds are worth ¥125 trillion, giving it a market share of 40% (see chart). The post office has political clout to match: most of the 271,000 workers in its 24,700 branches are strong supporters of the ruling Liberal Democratic Party.



In its new incarnation, the post office will lose only a few of the perks that it currently enjoys. Japan Post will remain exempt from nearly all taxes. Like bank deposits, postal savings are fully protected by the government; unlike the banks, however, Japan Post will not have to pay any deposit-insurance premiums. This, complains the Japanese Bankers Association, has saved the post office around ¥4.5 trillion in the past decade.

Life insurers are miffed too. Japan Post will not have to pay into the industry's policyholder-protection fund. Its policies, unlike the private sector's, are guaranteed by the government. The private industry has not recovered from the 1980s, when the post office, which did not have to worry about profitability, started raising rates of return on its policies. Prodded in part by the finance ministry, private life insurers followed suit. The burden of these high payout rates has pushed six life insurers into collapse in the past four years, and has left others struggling to survive.

Critics have long complained that the post office receives lenient regulatory treatment, having been overseen by the ministry to which it belongs. This will change only a little. Japan Post's savings and insurance operations will be inspected by the Financial Services Agency, regulator of financial institutions. However, the MPHPT will retain the final say over what to do with the inspection results.

Postal orders

Despite all these advantages, the post office may think it has some holes to fill, especially now that it is expected to chase a profit. For a start, it has suffered as stockmarkets have fallen, albeit less than its private-sector rivals, thanks to stricter government investment guidelines. Furthermore, it predicts that

as products mature, its outstanding balance of deposits will fall by ¥27 trillion over the next four years, and its insurance assets by ¥10 trillion.

For a giant, Japan Post looks as if it might be surprisingly nimble. One of the post office's bigger branches has already enlisted the help of Toyota, Japan's biggest carmaker, to help streamline its operations. Bankers admit that their efforts to use information technology more efficiently pale in comparison with the strides the post office has made.

Japan Post is also mulling a move into new products, such as mortgages. The banks are horrified. They have only just celebrated the news that the government-run (and subsidised) Housing Loan Corporation, which has undercut them for decades, would be wound up by 2005. Now they could be hurt by Japan Post, because the post office, unlike banks, is exempt from stamp duty. Japan Post is also considering selling investment trusts at its branches, something banks were allowed to do only in 1998. Although Japan Post will need parliamentary approval, it surely has enough political friends to secure it. Indeed, politicians, keen to prop up Japan's falling stockmarkets, are already trying to persuade postal depositors to switch into equity investment trusts.

Turning the post office into an independent public corporation is supposed to be a stepping-stone towards privatisation. If that is achieved, the post office and its private-sector rivals might one day compete on equal terms. This first stage, however, has merely made the post office stronger. And privatisation might never happen. As in so many areas, Mr Koizumi's idealism has foundered on the opposition of more conservative politicians, and the privatisation plans are on ice.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

India's finances

Small savings, big headache

Mar 27th 2003 | DELHI
From The Economist print edition

The expensive funding of India's huge public-sector deficit

AP

Singh's mild sting for savers

WHEN he unveiled India's annual budget last month, Jaswant Singh, the finance minister, made himself more popular with India's middle classes than with orthodox economists. On one measure, however, the reverse was true. Economists admired his decision to cut, by a percentage point, the interest rates paid on a plethora of government-backed savings schemes. Their praise was grudging, though. They wished he had gone further, faster, to resolve a dilemma at the heart of India's fiscal mess.

The scale of that mess is prodigious. The “consolidated” budget deficit, including central and state governments and state-owned businesses, has been running at about 11% of GDP since 1999. Some two-fifths of this is accounted for by the governments of the 28 states and of the capital, Delhi. Although their ability to borrow is constrained by the need to gain approval from the central bank, no such constraint affects their access to “small savings” deposits—a variety of post-office, certificate and bearer-bond savings schemes. These are an obligation of the central government, but the receipts, net of redemptions, go to the state governments, which then repay the centre over 25 years.

The states thus have every incentive to raise as much in small savings as possible. Gross “collections” of the savings increased at an annual rate of 17% during the 1990s. They are now running at about 1 trillion rupees ($21 billion) a year; net collections—ie, after redemptions—are about half that. During the 1990s, the proportion of state deficits financed by net collections climbed from 28.6% to 37.4%.

In a country in which the private sector saves about a quarter of GDP, the attractions of the schemes are clear, especially because they enjoy tax breaks that make them popular among the better-off. Even after his latest rate cut, Mr Singh reassured savers that the schemes would still offer an inflation-adjusted yield of 6.3% a year. That is not bad for a risk-free asset with a maturity of one to six years in theory, and often only a few months in practice. The corollary, of course, is that the states' cost of borrowing is inordinately high. Indeed, they pay the central government a slightly higher interest rate than savers receive.

The cost, however, is masked, because about half of new collections are used to repay deposits. “It is a complete Ponzi scheme,” says Surjit Bhalla, an economist with Oxus Fund Management in Delhi, and a long-term campaigner for an overhaul of what he calls “scam savings”.

The worry is not just the cost to the states. Worse, the administered interest rates on the small-savings schemes place a floor under other rates that are supposedly set by the market. As Mr Singh's predecessor, Yashwant Sinha, said when he was in office: “Not only are such high interest rates putting an unsustainable burden on both central and state governments, but the resulting high cost of capital is also inhibiting economic growth all round.”

A committee appointed by Mr Sinha on how to set the administered rates reported in September 2001. Mr Singh is now acting on some of its recommendations. He says that states will be offered the chance to swap their expensive borrowings for new, cheaper debt. The burden will fall on the central government and the taxpayer. But this does offer a clean start.

Mr Bhalla, for one, is optimistic that a resolution is in sight in the next year or two. He should hope that Mr Singh moves fast, for two reasons. First, India's deficit is not sustainable indefinitely. Second, in his budget Mr Singh was widely seen as having an eye on the elections due in 2004. In a year's time, he will surely be even more preoccupied with the ballot box, and more loth to undertake bold reform.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economics focus

A capital idea

Mar 27th 2003
From The Economist print edition

Despite the troubles of United Airlines, employee ownership is here to stay

KARL MARX once explained how capitalism works. A few plutocrats own the means of production. The *Lumpenproletariat* toils away in factories: the value it creates goes wholly to the capitalists, and its share of the fruits of its efforts dwindles until the advent of revolution and a workers' dictatorship.

As it turns out, capitalism has come closer than communism ever did to giving workers control of the means of production. In America in particular, employees' ownership of shares in the companies they work for, as well as in other firms, has grown enormously in the past two decades.

Although Marx's capitalist fable had big flaws—workers in rich countries, at least, have become far better off, not worse off—it was correct in one crude respect: the suppliers of capital and labour have usually been different people, with different interests. Milton Friedman, the greatest living champion of laisser-faire, believes strongly that companies perform best when they are run for the benefit of their owners, not their workers. American and British businessmen often look askance at continental European capitalism, in which labour has a say in the running of companies without risking any capital.

But what happens now that labour owns businesses, or at least chunks of them? Employee ownership would seem to solve a host of ills, appealing to Friedmanites and Marxists alike. On the one hand, it is supposed to get employees to think like owners, making them more committed to improving quality and to working harder. On the other, the cruel class struggle should be blunted, improving social cohesion.

Recently, however, this idea has been sorely tested. Since 1994, employees of United Airlines have owned 55% of their company, in America's boldest experiment with worker-owned capitalism. But United is in deep trouble: it filed for bankruptcy protection last year and it now seems quite likely to shut down altogether. Some newspaper columnists have fingered worker-ownership as the culprit, arguing that labour cannot be trusted to run a company.

Not so fast. Douglas Kruse and Joseph Blasi, two labour economists at Rutgers University in America, have charted the rise of employee ownership in the United States over the past 20 years*. They find that one-fifth of American employees own shares in the companies they work for, with an average holding worth several thousand dollars. Surely that should be enough to align workers' interests with those of other shareholders?

Maybe not. In surveys, workers who have been given shares claim to have greater motivation and more “identification” with their company. But they appear neither to be more satisfied with their jobs nor to work any harder than their lumpen comrades. Moreover, any good feelings seem to stem more from the status of ownership than from the size of their stakes. They are as likely to want a trade union as those without shares.

So much for what workers say and feel. A more critical question is whether firms in which employee ownership is significant (on the authors' definition, over 5%) and widely dispersed (ie, more rank-and-file workers than bosses own shares) do better in terms of productivity than others. Mr Kruse and Mr Blasi looked at dozens of studies covering the past two decades. These found that productivity (output per hour worked) rises by 4-5% in the first year that a company creates an ESOP (employee share-ownership plan), more than double the average for all American firms. Moreover, ESOP companies continue to enjoy higher productivity growth in later years.

Productivity is certainly good for shareholders, but it may not be so good for workers if it comes at the expense of jobs. The authors looked at whether employee-owned firms in the same industry were more or less stable in their hiring and firing than their less enlightened peers. Employee-owned firms were no different, even though they enjoyed higher stockmarket returns than ones with only capitalist owners. Indeed, employment grew faster at employee-owned firms, though not at the expense of profits. Encouragingly, employee-owned firms were less likely to go bust than firms without worker ownership.

Yet there are risks for employees. Many end up with a large fraction of their net worth invested in their own companies' shares. This increases their risk exposure to a single company—as workers at Enron discovered. But Mr Kruse and Mr Blasi found that firms with ESOPs are, by and large, more likely to offer employees traditional, defined-benefit pension schemes, which insulate workers from the vagaries of share-price movements.

Unfriendly skies

Given the benefits of worker ownership, why did things go so spectacularly wrong at United? First, it created an ESOP in a state of distress, and yet was not tough enough about the conditions it imposed in exchange. The professors say that employee ownership works best at firms where the share-ownership plan is introduced in more tranquil times.

Second, even when its workers owned shares, United's stroppy trade unions decided to fight to preserve their onerous work rules and “industry-leading” pay rises. One lesson is that workers should give up trade-union power—an artefact of the old days, when labour and capital opposed each other—once they become owners. Another is that employee ownership alone cannot solve deep-rooted ill-will between managers and the workforce. United's fate certainly demonstrates that even worker-owned firms can fail. Yet there are around 10,000 large or medium-sized firms in America with employee stakes exceeding 4% of capital, and many more in the rest of the world. Long live the revolution.

---

* See www.nber.org/~confer/2002/Iss02/kruse.pdf

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

The environment

The spoils of war

Mar 27th 2003
From The Economist print edition

Corbis

What can the past tell about the effect of military conflict on the environment?

DURING the 1991 Gulf war, the snowy-white peaks of Iraq's northern mountains turned black. Soot from burning oil created a biblical rain that stained everything from houses to mountainsides. In Afghanistan, a country devastated by more than a quarter of a century of warfare, people still fish with rocket launchers. It seems obvious that military conflict takes a dreadful toll on the environment. Yet previous wars suggest that the connection is not so obvious as one might suppose.

The main environmental problems that conflict in Iraq may bring are the pollution of water by sewage, the felling of trees to meet energy shortages, the physical degradation of the land, and pollution from materials such as oil. The seriousness of any of these problems will depend largely on the length and severity of the war, and on how quickly aid agencies can get in afterwards.

In Iraq, the chief worries are pollution from oil spillages and burning oil wells. In the 1991 war, some 6m-8m barrels of oil were spilt into the sea, producing an oil-slick that cost more than $700m to clean up. That was bad. But it was not the environmental apocalypse that many had feared. And although it is still early in the current conflict, there is some ground for optimism that this level of pollution will not happen again. In Iraq's southern Rumaila oil fields, which produce 60% of the country's oil, only nine out of 1,000 wells are reported to be alight. In 1991, 600 Kuwaiti wells were set on fire, 76 wells were uncapped and 99 wells were damaged.

Another cause for concern, the use of ordnance tipped with depleted uranium (DU), may also be less of a problem than many fear. A report on the use of DU in the fighting that racked Bosnia in the mid-1990s was published on March 25th by the post-conflict assessment unit (PCAU), a branch of the United Nations. It finds that no medically significant levels of radioactivity can be measured there. Of 15 sites inspected by the PCAU, only two have airborne radioactive particles, and these are within safety limits.

Fight and flight

Oil fires are visible, and radioactivity is scary. But the worst environmental problems associated with warfare are more subtle. The biggest is the displacement of large numbers of people. The PCAU has found that even though bombs, troop movements and landmines caused awful problems in Afghanistan, the most serious long-term consequences have resulted from the uncontrolled use of resources,

particularly the cutting of forests for firewood, by 6m cold, hungry and often well-armed refugees. After three decades of conflict, the forests are almost gone, lakes have dried up and topsoil is blowing away. The productivity of the land, in other words, has been destroyed.

In Palestine, too, the most visible kinds of environmental damage may not be the most threatening. Bulldozers and tanks chew up the scenery. But another report by the PCAU suggests that the biggest environmental concerns should be the quality and scarcity of water. Pekka Haavisto, who chaired the UNEP taskforces in Afghanistan, Palestine and the Balkans, is particularly worried about the declining quality of fresh water in Gaza. Here, continuing conflict prevents the Palestinian Authority from building sewerage and water-cleaning systems. As a result, groundwater is being polluted by agricultural chemicals and by waste from landfills and the burning of refuse. The same applies in Iraq, where conflict over the past decade has caused widespread damage to water and sewerage infrastructure, and reduced the amount of water available by more than half.

In Iraq, much of this damage is deliberate. A few years ago, the government decided to drain the marshes of lower Mesopotamia, in what amounted to an act of environmental warfare. These marshes, which some scholars believe are the area referred to in the Bible as the Garden of Eden, are inhabited by people who have had the temerity to oppose Saddam Hussein. The marsh Arabs are Shia Muslims, who are suspected of sympathising with the Shia government of Iran. The drainage was part of Mr Hussein's repressive anti-Shia measures.

EPA

After the fall

According to the AMAR foundation, which works to assist marsh Arabs and other refugees, these measures included the poisoning and napalming of the marshes and anybody living there. Only 7% of the original marshland remains. If the drainage continues, the rest is likely to vanish within five years. Open-water areas are now dusty salt-pans. A productive ecosystem, which supported hundreds of thousands of people and supplied 60% of the country's fish, has almost vanished.

A coalition victory could change that. Ed Maltby, a researcher at Royal Holloway, a college in the University of London, says that getting the marshes back to the state they were in 15 years ago will be a challenge—but it could be done. Last month, he and his colleagues in the Eden Again project, a scientific collaboration financed by an Iraqi human-rights group, met to work on a restoration plan. The idea is to start with pilot areas, thousands of hectares in size, and then expand them. There are huge problems ahead, including salt and pesticide contamination, the need for additional water flow from Turkey, and, of course, money. But Dr Maltby says it is an opportunity and a test of the world's ability to respond to one of the worst environmental disasters for a generation.

Eden again?

By and large, conservationists agree that war is a bad thing. Surprisingly, however, armed conflict—or the threat of it—can sometimes be good for the environment. The demilitarised zone between North and South Korea is a 250km-long strip of mountains, jungle and wetlands untouched by humans since 1953. It is now home to wildlife extinct elsewhere on the peninsula. Landmines laid in civil wars in Africa have discouraged hunters and allowed game to flourish in areas from which it had previously disappeared. In Congo, anarchy has prevented mining companies and timber firms from spreading into the country's remaining wild areas. Although many large animals have been killed by gun-toting soldiers, recent aerial surveys suggest that Congo's rhinos have survived the conflict well; some 6,000 elephants remain too.

The people of Congo would doubtless prefer less anarchy, even if it meant fewer elephants. But the fact remains that when men are busy killing each other, nature sometimes gains.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

A perfect fossil

Mar 27th 2003
From The Economist print edition

According to legend, the salamander was a creature which thrived in fire, but died when exposed to air. Not this one. It was killed 161m years ago by a rain of fire from a volcano in what is now Inner Mongolia, in northern China. Traces of soft tissue are preserved only rarely in amphibian fossils, but in this case, the detail is exquisite. The animal's gills can be seen protruding from its head. Its last meal of tiny crustacea called conchostracans is visible in its stomach. The delicate folds of its tail are as clear as if it were still swimming. The specimen, one of about 200 fossil salamanders found in the area by Gao Keqin, of Peking University in Beijing, and Neil Shubin, of the University of Chicago, is described in this week's Nature.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Human reproduction

Sex in season

Mar 27th 2003
From The Economist print edition

The time of year that a child is conceived may affect its sex

OLD wives' tales are full of advice for mothers-to-be on how to determine the sex of their future child, from what to eat before conception to the best sexual positions for making boys or girls. The Chinese even developed a conception calendar, or *Shengyubiao*, based on a woman's age in lunar years and on the month of conception, for couples to choose the sex of their offspring. Such methods sound more like superstition than science. But a study published in the April issue of *Human Reproduction* argues that the sex of a child may indeed vary according to the time of year that he or she is conceived.

Angelo Cagnacci and his colleagues at the Policlinico of Modena, in Italy, have examined the records of more than 14,000 children born at the town's Institute of Obstetrics and Gynaecology between 1995 and 2001. The group found, as others have elsewhere, that there is no significantly “high” season for delivering boys versus girls. But Dr Cagnacci reasoned that such seasonal differences might be masked by variations in the length of pregnancy. So he and his team analysed the dates of conception of the children, which the institute had established by taking ultrasound snapshots of the babies as fetuses.

Using these data, they found that there were significant seasonal variations in the number of conceptions, and also in the proportion of boys and girls conceived, at particular times of the year. According to Dr Cagnacci, a normal sex ratio is 511 males and 489 females out of every 1,000 conceptions that yield a live birth. But the study showed that from September to November there were both more conceptions and a higher ratio of boys to girls conceived than would be expected or could be chalked up to chance. From March to May, the converse was true.

Why should this be? Unlike many species, humans are not seasonal breeders. Couples' reproductive urges seem to have more to do with champagne and roses than daily temperature or hours of sunlight at certain times of the year. But Dr Cagnacci argues that the seasonal variation he finds in the number of conceptions may allow children to be born in more favourable conditions.

If so, it makes sense that more boys than girls would be conceived at the times of the year when they have a better chance of survival. This is because in biological, if not literary, terms, males are the weaker sex. They are more likely than females to perish at every stage of life, from pregnancy to old age. Other studies have shown that fewer boys than girls are born when their parents are stressed by age, smoking, exposure to pollution or even earthquakes. Dr Cagnacci speculates that nature therefore tips the sexual balance in conception—perhaps by influencing hormone levels that affect semen or the implantation of male as opposed to female embryos—so that more boys are created in biologically favourable conditions.

Still, many unknowns remain. There is, as yet, little evidence to show that children conceived at certain times of the year are healthier than others on the basis of season alone. Nor have the researchers ruled out the possibility that the seasonal effects are due to other factors, such as smoking patterns. Nor do they have evidence for any biochemical mechanism to explain their findings. Until these questions are resolved, conceiving a boy or a girl through old-fashioned sex will remain something of a shot in the dark.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Number theory

Primed to go

Mar 27th 2003
From The Economist print edition

Mathematicians are discussing ways to make code-breaking easier

MATHEMATICS is often desperately abstract. Yet it has a great deal to say about the world, from bombs and bridges to cars and codes. Keeping things secret is vital not only to spies, but to anybody who uses a computer or a credit card. The codes employed are all based on numbers, so understanding the science of numbers, known as number theory, is fundamental to the making and breaking of codes. That is why a workshop on number theory organised in Palo Alto by the American Institute of Mathematics was not quite as esoteric as it sounds.

What makes number theory interesting is that problems that are simple to state (at least to mathematicians) are often fiendishly difficult to solve. The most famous such problem, Fermat's last theorem, was postulated in the 17th century. It took until 1993 to prove that it was true.

Last August, Manindra Agrawal, of the Indian Institute of Technology in Kanpur, and two of his undergraduate students, proved another, less famous, conjecture—that there is a fast way to show whether a number is prime. Since prime numbers lie at the heart of cryptography, that might, eventually, make codes easier to break.

A prime number is one that is divisible only by itself and 1. So the obvious way to find out whether a number is prime is to try dividing it by all numbers which are smaller than its square root. However, when a number has hundreds of digits, factoring it this way is not as easy as its sounds. Instead, mathematicians turn to other, indirect, methods that can test for primality without factorisation. Until Dr Agrawal's discovery, even these indirect methods were slow. Dr Agrawal's is not.

The algorithm at the centre of his method first checks whether the number in question is a perfect square, cube, or other power of a smaller number. If so, it is clearly not prime. If not, a sequence of tests using a type of mathematics called modular arithmetic is carried out. If certain conditions are satisfied, the number is definitely not prime. If they are not, then it is. Crucially, the time it takes to run the algorithm increases only slowly as the size of the number rises.

This discovery has triggered a flurry of developments, and it was these that the workshop considered. The participants focused on two areas: improving Dr Agrawal's technique, and using similar methods to attack other problems in number theory. Hendrik Lenstra, of the University of California, Berkeley, discussed with the assembled company one way to simplify and speed up Dr Agrawal's algorithm. His method relies on some fairly basic mathematics—indeed, it uses another of Fermat's theorems, known as Fermat's little theorem. Other novel ideas discussed were more esoteric. Employing the negative powers of co-prime polynomials (don't ask) may speed things up. And Dr Agrawal is interested in using similar techniques to investigate the long-standing problem of taking square roots in finite fields (again, don't ask).

There is still some way to go before any of this work actually threatens cryptography. That is because quick and dirty techniques for testing primality already exist. Unlike Dr Agrawal's method, and its slower predecessors, these sometimes make mistakes, falsely attesting that a number is prime. But because such mistakes are rare, they are tolerable. However, if Dr Agrawal's primality test can be extended to factoring numbers, it would mean a rejigging of modern cryptography. Then the spooks and bankers really would be worried.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Correction

Mar 27th 2003
From The Economist print edition

In our March 22nd print edition (see article) we said that Ames was a NASA research lab in Iowa. In fact the NASA Ames research centre is in California. The Ames laboratory we referred to, in Ames, Iowa, is part of America's Department of Energy.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Sandy Weill

King of the high C

Mar 27th 2003
From The Economist print edition

AP

Wilful and prickly, Sandy Weill took a long time to reach the very top. His final ambition, to clean up Wall Street, could take even longer

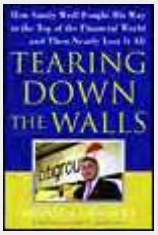
ONLY in the past year, his 70th, did Sandy Weill become what he had worked towards for much of his life: the undisputed—with all due respect to those self-styled masters of the universe at Goldman Sachs—king of Wall Street.

How ironic, then, and how unkind of fate, that Citigroup's head was crowned just at the moment when his new kingdom fell from grace. As Monica Langley relates in her rollicking biography, on the same day last summer that Mr Weill was named chief executive of the year at the New York Stock Exchange, his best known employee, Jack Grubman, was testifying before Congress in a performance of arrogant dissembling that will long be remembered. No wonder Mr Weill was sweating when he called in his acceptance speech for greater virtue in corporate America.

Citigroup's boss spent the rest of 2002 dealing with the fallout from the Grubman affair. Indeed, it nearly cost him his job, after it emerged that Citi had donated $1m to get Mr Grubman's children into an elite nursery school, and that Mr Grubman had changed his negative recommendation on AT&T shares—at a mightily convenient time for Mr Weill, who sat on AT&T's board just as its boss sat on Citi's. That Mr Weill still rules both at Citigroup and over Wall Street may partly be because of the regulators' fear that, with Wall Street's reputation already badly damaged, throwing out the boss of the world's biggest financial firm might seriously undermine public confidence in the system.

In the end, Mr Weill agreed that Citi would share in a $1.4 billion global settlement between Wall Street firms and regulators. Even at that price, he must feel that he has got off lightly, though it remains to be seen whether the settlement and Mr Weill's continuing reign at Citi will do much to restore Wall Street's fortunes.

Tearing Down the Walls: How Sandy Weill Fought His Way to the Top of the Financial World and Then Nearly Lost It All
By Monica Langley



Wall Street Journal Books; 464 pages; $27

Buy it at
Amazon.com
Amazon.co.uk

As a young man, Mr Weill had not looked on finance as a career. At the age of 22, the Cornell student's plans foundered when his father suddenly announced that he was divorcing Sandy's mother and selling the family's steel-importing business where the son had expected to work. The resulting turmoil caused him to miss a crucial exam and a timely graduation. It even briefly threatened to prevent his marriage to Joan, whose influence—and stoicism—throughout her husband's career have made her a celebrated corporate wife.

In search of a job, Mr Weill turned to Wall Street—only to discover that it was not easy being a Jew in what was then still a bastion of Waspishness. Mind you, it was not just the Wasps who refused him: Goldman Sachs hired the descendants of German Jewish émigrés, but not those of East European Jews, such as Mr Weill.

Instead, he formed a brokerage business with a Roman Catholic and two other Jews with similarly unpleasant experiences of Wall Street. Before long, the group was joined by Arthur Levitt, who went on to head the Securities and Exchange Commission, America's main market regulator, during the bubble years. (The book begins with a helpful cast of characters, a “Who's Who” of Wall Street during the past four decades.) But the firm—Cogan, Berlind, Weill & Levitt—known by some as “Corned Beef With Lettuce” after its partners' initials—was no Jewish enclave, shaming old Wall Street firms with its hiring of black and female workers. The firm soon boasted its own in-house Wasp, Hardwick Simmons, now boss of Nasdaq, who joined after it rescued his family firm.

Mr Simmons opposed what was perhaps the worst decision of Mr Weill's career: the sale of the firm, by then called Shearson, to the ultra-Waspish American Express in 1981. “The Jews are going to take over American Express,” trumpeted Mr Weill after the deal was done. But the commander had given up control, settling instead for what proved to be an unbearably frustrating second-rank position below Amex's Jim Robinson. By 1985 Mr Weill had quit.

Thirteen years later, by the time he had completed the merger of Travelers—the second major firm he created—with Citibank, Mr Weill had learned his lesson. He and John Reed, Citibank's boss, became the new Citi's co-heads. When, by February 2000, to nobody's surprise, the cerebral Mr Reed and volatile Mr Weill had fallen out irreconcilably, the board backed Mr Weill, who by then was already running the daily business of the firm.

Mr Weill's obsession with managing the details makes it hard to believe that he was entirely unaware of what Mr Grubman and his colleagues were up to. But the book closes with Mr Weill in penitent mood. Until the problems in the research business are resolved, he promises “no gin, no dessert, no bread—none of the stuff I love”—which is something of an imposition for a man who clearly enjoys his food. He also says he wants “a better Wall Street, not just a more profitable company, to be the capstone of my career”. To achieve that, he will surely need to rule Wall Street for a good number of years yet—a prospect that is not necessarily to be counted on in these uncertain times.

Tearing Down the Walls: How Sandy Weill Fought His Way to the Top of the Financial World and Then Nearly Lost It All.
By Monica Langley.
Wall Street Journal Books; 464 pages; $27

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Crossword puzzles

One who rebelled

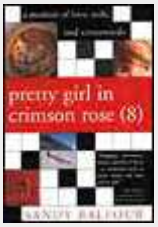
Mar 27th 2003
From The Economist print edition

ABOUT two-thirds of the way through this entertaining memoir of love, exile and crosswords, Sandy Balfour tells how, in 1997, while heading north on the new N2 in South Africa's KwaZulu-Natal province, he picked up a hitch-hiking university student. They talked of this and that, eventually turning to football, and in particular to a game between two English teams, Arsenal and Everton, that was being broadcast by the BBC World Service from the radio on Mr Balfour's lap. Suddenly, to the hitch-hiker's astonishment, Mr Balfour punched the air and shouted, “Got it. I've got it. It's Everton!”

What he had found, after a long search, was the answer to the final clue in the first *Guardian* crossword puzzle that he had managed to complete. By this stage the sympathetic reader, who has been following his progress as a crossword puzzle solver, is as delighted as he is.

In using crossword puzzles as his central idea Mr Balfour has taken a considerable risk. It is not easy to write about love, identity, meaning and belonging without coming across as portentous or precious. It is particularly difficult if you base your account on a conceit that could turn off some potential readers before they even begin.

Pretty Girl in Crimson Rose (8): The Puzzling Memoir of a Man in Love with Words
By Sandy Balfour



Penguin Putnam; 224 pages; $23.95.
Atlantic Books; £12.99

Buy it at
Amazon.com
Amazon.co.uk

But those who are not crossword enthusiasts should give him a chance. Mr Balfour, who was born in South Africa in 1962, emigrated to England with his girlfriend when he was 21. Together they made their home in London and have raised three children there. This book is his attempt to explain himself to himself as he searches for meaning in the experiences of the last 20 years. It is also a touching tribute to his partner, who introduced him to crossword puzzles in the first place. You close it feeling you have encountered a modest man of humour, compassion and common sense, who wears his wisdom lightly. You also find that you have learned a great deal, and are able to solve the clue that is his title.

Pretty Girl in Crimson Rose (8): The Puzzling Memoir of a Man in Love with Words.
By Sandy Balfour.
Penguin Putnam; 224 pages; $23.95.
Atlantic Books; £12.99

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Volcanoes

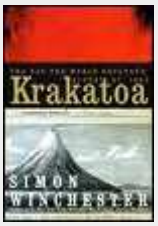
One way to dig a hole

Mar 27th 2003
From The Economist print edition

THE eruption of Krakatoa vaporised an entire island. It started a shock wave that travelled round and round the world and it caused the drowning of tens of thousands of people in what is now Indonesia. Given all that—not to mention the onomatopoeia—it is no surprise that Krakatoa always seems to be thought of as the most devastating eruption in history.

In fact, despite the grim tide of death—some of its 35,000 victims were washed up as far ashore as east Africa—Krakatoa was not even the most violent volcanic explosion of the 19th century. That honour goes to Tambora, also in Indonesia, which exploded in April 1815. Unlike Krakatoa, whose effects were purely local, unless you count a succession of dazzling sunsets across the world, Tambora had far-flung consequences. It is thought to have contributed to the appalling weather that so hampered Napoleon two months later at Waterloo. The following winter was one of the harshest in modern history, and for the next few years, crop failures caused famine and social unrest throughout Europe. Despite Simon Winchester's best efforts to establish a link between Krakatoa in 1883, an abortive Islamist uprising in 1888 and the end of Dutch rule in 1949, Krakatoa simply cannot compare.

Krakatoa: The Day the World Exploded—August 27, 1883
By Simon Winchester



HarperCollins; 432 pages; $25.95. Viking; £16.99

Buy it at
Amazon.com
Amazon.co.uk

There is a temptation, then, to charge Mr Winchester with trying to make more out of Krakatoa in his new book than it really merits. But he has written so engagingly discursive an account of the events leading up to the cataclysm—which finally occurs, after a masterful build-up of literary and geological tension, only on page 234—that it is impossible to be so harsh. What Mr Winchester has provided, appropriately enough, is a lavish *rijstafel* of a book, whose many dishes can be sampled according to individual palates.

Long before we come to the carefully gathered eyewitness reports, there is a serving of colonial history. Mr Winchester proceeds deftly through the rivalries of Dutch and Portuguese, Chinese and Muslim in their quest for the trinity of spices—nutmeg, cloves and pepper—adding such little-known details as that, 200 years before the birth of Christ, Han Dynasty officials were permitted to address their emperor only once their breath had been sweetened by a mouthful of “odoriferous pistils”, or Javanese cloves. As everyone knows, the Dutch were to triumph once they had mastered “the wild navigation”, the passage to the Indies westwards by way of Cape Horn. Less known perhaps, is that only 60 years after the foundation of Batavia, modern-day Jakarta, in 1619, some of those hardy Dutchmen witnessed the aftermath of what seems to have been an early, and rather benign, eruption of Krakatoa. From then on, the Dutch East India Company—one of the world's first joint-stock companies and the creator, according to Mr Winchester, of the world's first commercial logo—was living on the edge of catastrophe.

Other delicacies include a crash course in plate tectonics—for Indonesia has the misfortune to run along the meeting-point of the Australian and Asian continental plates. The vast “subduction zone” where they collide is a potent generator of earthquakes and volcanoes of extraordinary violence.

Biology, another course on Mr Winchester's table, is intimately connected with geology. The “Wallace Line”, first noticed by Alfred Wallace in the 1850s, is the demarcation between the faunas of Asia and Australasia, which are quite distinct. Running very close to the geological fault line, Wallace's divide passes through the Indonesian archipelago, so that islands only a few dozen miles apart are home to entirely different suites of creatures. It attests that in the past, the world looked very different from the way it appears now.

The history of communications is yet another of the book's offerings. Krakatoa is infamous partly because it was the first really large natural disaster to be relayed to the world in something approaching real time. Only as recently as 1865, 18 years before the eruption, news of Lincoln's assassination had taken 12 days to reach London. What had changed in the interim was the installation of a network of reliable underwater cables. These had become possible only with the invention of a durable sheathing material, made of a substance called gutta-percha. And gutta-percha, as Mr Winchester notes in the sort of aside that makes this book such a pleasure, is made from the sap of a tree, *Isonandra gutta*, which is found in Borneo, Java and Sumatra.

Krakatoa: The Day the World Exploded—August 27, 1883.
By Simon Winchester.
HarperCollins; 432 pages; $25.95. Viking; £16.99

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Israeli dissent

Patriots too

Mar 27th 2003
From The Economist print edition

AFTER the collapse of the Camp David peace talks towards the end of 2000, and the start of the Palestinian *intifada*, many Israelis started to articulate a single, strident message: they had offered the Palestinians a priceless gift, and been kicked in the teeth for their pains; so be it, they would now show the so-and-sos who was master. A substantial majority of voters (twice) elected Ariel Sharon to do just that. But some disagreed, and a few of those—loyal Israelis all—have packaged their dissent into a neat volume of short essays and articles written over the past two years.

What good will it do? asks Tom Segev, an Israeli newspaper columnist, in his foreword. Israelis have an expression “shoot and cry” for those who allow things to happen even as they deplore them. Maybe, he suggests, he and his fellow dissenters are writing for their own relief, to detach themselves from Israel's “tribal, isolated, emotional and nationalistic mood”, and to show future historians that there were white hats around, even if they couldn't do much about anything.

Listen for instance to Ami Ayalon, once head of the Shin Bet security service, describing in an interview with *Le Monde* the wrong-headedness of current Israeli policy. Freed from American pressure since September 11th—a date that another writer describes as “a Hanukkah miracle” for Israel—the Israeli government ploughs its own path. But time, Mr Ayalon argues, is not on Israel's side. Demographically, it benefits the Arabs. Politically it favours the extremists: Hamas, the militant Islamist movement and the ideological settlers.

He calls, as others do, for withdrawal from the occupied territories to give the Palestinians the hope of a proper state. Gideon Levy is a journalist who, like Mr Segev, writes for *Haaretz*, the newspaper from which several of these essays are reprinted. Mr Levy questions the wisdom of Mr Sharon's onslaught on terrorism, and laments that “We have again become one nation that speaks with one voice and doesn't ask questions such as...what is the infrastructure of terrorism if not the occupation, the despair and the hatred?”

The effect on Israel of Mr Sharon's policy of massive reprisal, his preference for force over diplomacy, is what concerns writer after writer. They see a new arrogance and a new cruelty. Michael Ben-Yair, a former attorney-general, writes that occupation has transformed Israel from a just society to an unjust one. The steps taken to prolong the occupation—killing the innocent, executing wanted men without trial, the encirclements, closures and roadblocks—“are causing us to lose the moral base of our existence as a free, just society”. Young reservists explain why they refuse to serve in the occupied territories. Meron Benvenisti, a former deputy mayor of Jerusalem, reflects on the arrogance of the soldiers at the roadblocks, and, in a concluding essay, looks to a time when Israelis will oppose current policy. Yet none of these writers, not even Mr Benvenisti, believes that this is likely to happen any time soon.

The Other Israel: Voices of Refusal and Dissent.
Edited by Roane Carey and Jonathan Shainin. Foreword by Tom Segev.
New Press; 208 pages; $22.95

The Other Israel: Voices of Refusal and Dissent
Edited by Roane Carey and Jonathan Shainin.
Foreword by Tom Segev

New Press; 208 pages; $22.95

Buy it at
Amazon.com
Amazon.co.uk

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

New fiction

The burdens of the sons

Mar 27th 2003
From The Economist print edition

“WE WERE born when there were heroes. How were we to know that the inescapable destiny of heroes is defeat?” The narrator of Elon Salmon's novel is Philo Jerusalem, son of the vigorous Gideon, a founder of the Jewish state who “rides the warlike chariot of Israel's destiny”, striving for excellence in all things, but dies in obscurity, laid low by petty politics. Philo—who falls in love not with the Jewish national project but with the cello, England and a frigid beauty from the shires—must survive the expectations of a demanding father and an exacting patrimony.

When There Were Heroes
By Elon Salmon

Dewi Lewis Publishing; 256 pages; $13.95 and £8.99

Buy it at
Amazon.com
Amazon.co.uk

Much of this complex novel is autobiographical. If the life too often takes the place of the plot, this is redeemed by a vivid evocation of what it was like to grow up in the pre-state Israel of the 1940s, with all the music and dynamism and the constant sense of siege. In Philo's kibbutz, “wide tracks converge on tall gates that shut at night. Milking machines in a spotless parlour thrum away as they pump liquid protein into the very heart of the Jewish settlement of Palestine.” The kibbutz girls, “children without a past, born to parents who have drawn a curtain over theirs”, toss their glossy hair under jets of water. Nearby, “amid the thorns and withered grass...dusty paths strewn with animal ordure meander up” to three Arab villages destined to fall in the looming war.

Reflecting later on Israel's failings, Philo concludes that “to understand without the ache, you need to take distance from the scene.” Yet he never stops feeling regret for the nation—no, the light to the nations—that might have been.

When There Were Heroes.
By Elon Salmon.
Dewi Lewis Publishing; 256 pages; $13.95 and £8.99

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

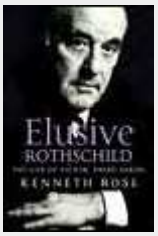
Biography

Friends and influence

Mar 27th 2003
From The Economist print edition

IT IS easy to imagine Victor Rothschild as one of the grander characters in Anthony Powell's “A Dance to the Music of Time”. Thanks to the Rothschild name and money, the doors of the powerful were always open to Victor. With the polymathic scope of his enthusiasms, combined with an innate love of gossip, the third Lord Rothschild knew most of what used to be called the British establishment.

Elusive Rothschild: The Life of Victor, Third Baron
By Kenneth Rose



Weidenfeld & Nicolson; 338 pages; £20.00

Buy it at
Amazon.co.uk

Although head of the senior English branch of the Rothschild family, the thing that least engaged him was banking. He was an eminent scientist, who developed a mathematical technique for deducing the speed at which sperm swim, and his study of sea-urchins broke new ground in the understanding of fertilisation. For many years he ran the mighty research department of Royal Dutch Shell. But he remains best known as the founding head of prime minister Edward Heath's “think-tank” in 1971 and for his long, ultimately turbulent connection with MI5.

Many of the iconoclastic studies undertaken by the think-tank—on subjects spanning Concorde and the future of the coal industry—helped galvanise public debate, but their influence was limited. This must have been frustrating for Rothschild, but these disappointments were dwarfed by what was to come later.

Despite distinguished wartime service as MI5's head of anti-sabotage, his friendships with Guy Burgess and Anthony Blunt blighted his declining years when the latter was finally unmasked as a Soviet spy in 1979. Rothschild fell victim to a smear campaign. But in his increasingly frantic efforts to clear his name, he made the mistake of becoming involved with a maverick former MI5 officer, Peter Wright, who became notorious when the British government banned his pseudo-revelatory book, “Spycatcher”. Although Margaret Thatcher later grudgingly confirmed that there was no evidence of Rothschild's ever having been a spy, he died feeling betrayed by the very establishment of which he had been such a gilded member.

Kenneth Rose, has written an engaging account of an extraordinary life. But the Rothschild that emerges is an enigma: brilliant and capable of kindness, but also emotionally withdrawn and occasionally spiteful. Social standing and money did not, it seems, make Victor Rothschild a happy man.

Elusive Rothschild: The Life of Victor, Third Baron.
By Kenneth Rose.
Weidenfeld & Nicolson; 338 pages; £20.00

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Parmigianino

A mannerist master

Mar 27th 2003 | PARMA
From The Economist print edition

An unusual show offers a chance to visit an enchanting city

YOU don't normally need a hard-hat to look at 16th-century painting. But at the church of the Steccata in Parma they insist on it before letting you up seven flights of scaffolding to a special viewing platform above the high altar. At the top, visitors come eyeball to eyeball with the swaying, seductive figures of three wise and three foolish virgins painted on the church's ceiling. They are among the masterworks of Francesco Mazzola, known as Parmigianino (1503-40). Close viewing of the frescoes, newly restored and as bright as billboards, is the high point of a splendid exhibition in and around this Po valley town to mark the 500th anniversary of a native son, one of the most refined and intense of the Italian mannerists.

A long time in the planning, the Parmigianino exhibition covers his career with an impressive range of paintings from Italian and foreign museums. These include graceful early works painted when he was emerging from the shadow of Correggio—14 years his senior and in demand for all the big commissions in Parma—through to the later portraits, whose melancholy seems to reflect some change in the painter himself.

Side by side are two remarkable but quite different portraits of the artist. One shows a sensitive yet immensely confident 21-year-old, painted in a convex mirror, a virtuoso self-portrait that has never ceased to amaze. Parmigianino is supposed to have wowed the papal court in Rome with it; centuries later it inspired an extended Pulitzer-prize-winning poem by a New York poet, John Ashbery. The other portrait shows the troubled, downcast face of an ill-kempt man already old in his 30s.

The organisers of the show, which goes to Vienna's Kunsthistorisches Museum after it closes, did not get all the works they asked for from other museums. Pleading anniversary plans of its own, the Uffizi Gallery in Florence refused to lend the painting that probably most typifies the artist's stylistic refinement, “La Madonna dal Collo Lungo”, a representation of the virgin as a most elegant swan-necked woman. That rejection led Vittorio Sgarbi, a controversial former arts minister and honorary president of the Parma show, to speak of “a Florentine outrage”. Two key works were too large to travel: the “Madonna and Child with Saints” in London's National Gallery, a youthful homage to his three aesthetic models, Michelangelo, Raphael and Correggio; and a late treatment of the same theme now in Dresden.

A rich selection of Parmigianino's drawings and prints partly makes up for these gaps. Through them his slender, elongated figures, like “Antea” (pictured above) were copied far and wide. Opening the show are minor works by Florentine mannerists and some very fine Correggios. At the end come mannerist painters from across Europe, including some Bartholomeus Sprangers from Vienna to illustrate the eccentric tastes of the Habsburg emperor, Rudolph II.

The Parmigianino show snakes through the impressive Palazzo Pilotta. This was the home of the dukes of Parma, originally a Farnese principality batted back and forth between the Spanish and the Austrians for a century and a half until Italian unification in 1860. Badly damaged by allied bombs during the second world war, the palace and its extraordinary wooden theatre were rebuilt in the 1950s. To walk about in these buildings is a treat in itself. Indeed, the Parmigianino show is an excuse to explore, not just Parma, but also the surrounding countryside.

There are Parmigianino exhibits in many smaller neighbouring towns. His frescoed room on the theme of Diana and Actaeon in the castle at Fontanellato is not to be missed. Nor is an intriguing show about alchemy in Casalmaggiore, just across the Po river in Lombardy. We have only Vasari's unreliable word that Parmigianino was actually interested in alchemy. No matter. It was at Casalmaggiore that Parmigianino died, after fleeing the overseers of the Steccata church, who were after him for not finishing the rest of those magnificent frescoes.

"Parmigianino e il manierismo europeo": Galleria Nazionale, Parma, until May 15th; Kunsthistorisches Museum, Vienna, June 4th-September 15th. The catalogue of the show is published by Silvana Editoriale, *euro*44.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

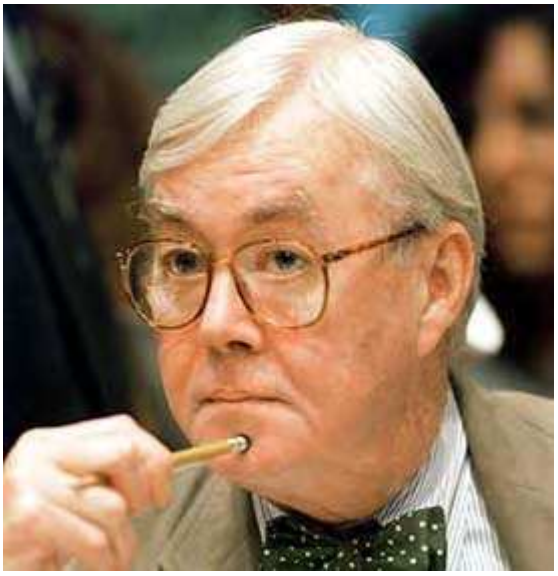
About sponsorship

Daniel Patrick Moynihan

Mar 27th 2003
From The Economist print edition

Daniel Patrick Moynihan, politician and polymath, died on March 26th, aged 76

AP



A POLYMATH in a profession of intellectual pygmies; a free thinker in a world of crushing orthodoxies; and a cheerful imbiber in a country that has turned, once again, to Puritanism—Daniel Patrick Moynihan really was one of the most remarkable American politicians of his generation.

There was something of the Oxford don about him. Visitors to his rooms in the Senate were greeted by a glass of dry sherry (Tio Pepe was his preferred brand) and a lengthy tutorial. A discussion of Social Security reform would inevitably include learned digressions on the Victorian poor laws. Mr Moynihan wrote or edited 19 books—more, it was said, than some of his Senate colleagues had read.

The donnish Mr Moynihan was also a tough Irish street-fighter. His career looked effortless: a Harvard professorship; jobs in four successive administrations, including ambassadorships to India and the United Nations; and finally, in 1977 a Senate seat for his “native” New York. Yet he was actually born in Tulsa, Oklahoma (a fact he sometimes conveniently forgot). He grew up in a broken home, helped to provide for his family by shining shoes and working on the docks, and attended New York's lowly City College.

His career was a testimony not just to character and brains, but to that past. He turned himself into an intellectual star by writing about ethnic America, a subject he knew well from his childhood in Hell's Kitchen. And his spells in high office were often tempestuous. During one spate of Israel-bashing at the UN, the same man who used to tick off this newspaper for misconstruing Virgil marched over to the Israeli ambassador. “Fuck 'em,” he advised.

Rebel with a cause

Mr Moynihan could be prickly. One reason why he turned against Hillary Clinton's health-care plans was that she neglected to consult him on a subject about which he had thought deeply. But even when prickly, he was better value than the average blow-dried politician; and even drunk he talked far more sense than most people do sober.

He was not a great one for party lines. The young Mr Moynihan shocked his Democratic friends in 1965

with a report that blamed social ills on the break-up of the black family. His thesis has since become conventional wisdom, but in the civil-rights era it was the purest heresy. He shocked them even more in 1969 by accepting a job in the Nixon administration. “Moynihan”, Herbert Stein observed, “was Nixon's soaring kite reaching out for the liberal chic eastern establishment.”

Mr Moynihan had little sympathy with the leftists who came to dominate his party in the 1970s. He enjoyed close friendships with neo-conservative sages such as Irving Kristol and Norman Podhoretz, and contributed enthusiastically to the *Public Interest*. “The nation is turning conservative”, he once observed, “at a time when its serious internal problem may well be more amenable to conservative solutions than to liberal ones.”

Yet Mr Moynihan never forgot about the Democratic Party's mission to improve the lot of ordinary people. He helped to write Lyndon Johnson's great speech in praise of affirmative action (“You do not take a person who, for years, has been hobbled by chains...and then say, ‘You are free to compete with the others'.”) He accepted a job in the Nixon administration in part because it gave him a chance to advance his most cherished social reforms. The former Harvard professor once gave Nixon a reading list of the “ten best political biographies”, including Robert Blake's biography of Disraeli. “You know very well”, the president told him after reading it, “that it is the Tory men with liberal policies who have enlarged democracy.”

Later, Mr Moynihan was just as harsh on conservative orthodoxy as he had once been on the liberal variety. In the 1980s, he remarked on “the degree to which conservatives seem to have displaced liberals as starry-eyed advocates of exotic and newfangled economic doctrines”. In the 1990s he fulminated against welfare reform. “Congress builds a coffin” was the title of one article he wrote on the subject. Mr Moynihan's washroom on Capitol Hill displayed two magazine covers: a 1979 issue of the *Nation* entitled “Moynihan: The Conscience of a Neoconservative” and a 1981 issue of the *New Republic* entitled “Pat Moynihan: Neo-Liberal”.

There was something old-fashioned about Mr Moynihan—a throwback to an earlier age when politicians championed causes, not parties. His cause was the poor. One reason why he so disliked McGovernite leftists was that he thought that they were middle-class brats, intent on hijacking the party of his birthright. And one reason why he was so interested in conservative intellectuals was that he thought that their ideas on the primacy of the family and the organic nature of society might be able to revitalise his party.

Most politicians measure their success in terms of bills passed and pork delivered. Mr Moynihan was surprisingly good at bringing bacon to New York. But he did something far more important than this. He helped to change the climate of ideas on the left—and in doing so he helped to drag his once stranded party back towards what he regarded as the vital centre.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Overview

Mar 27th 2003
From The Economist print edition

Stockmarkets suffered a reversal of fortune as the war in Iraq ran into fiercer opposition than expected. In the five trading days after the start of hostilities, markets at first rose on hopes of an early victory for the coalition, and then fell when stiff resistance emerged in some Iraqi cities. Over the week, America's Dow Jones Industrial Average fell by 0.4% and Britain's FTSE 100 rose by 0.7%. French and German stockmarkets fell by 1-2%, while Japan's Nikkei 225 rose by 3.7%.

In yet another worrying sign for American consumer spending, the Conference Board reported that its measure of **consumer confidence** had fallen to its lowest level in nearly a decade. In March, its index fell to 62.5 from a revised 64.8 in February, in line with the forecasts of analysts who were expecting greater consumer pessimism in the shadow of war.

Consumer prices in America rose by 0.6% in February, giving a 12-month increase of 3.0%, thanks in large part to higher petrol prices.

In **Canada**, consumer prices rose by 4.6% in the year to February, also owing mostly to higher energy prices.

German business confidence suffered a surprising fall in March, according to the Ifo business-climate index. The decline, from 88.9 in February to 88.1 in March, dashed the hopes of analysts who had hoped that Germany's firms were rebounding from their slump.

The **euro area's** 12-month trade balance fell in January to a surplus of $95.5 billion, and the monthly trade balance slipped into deficit for the first time since January 2001. The euro area's 12-month current account balance shrank to $53.5 billion in January.

The war in Iraq is worrying consumers even in countries that are staying out of the conflict. Consumer confidence in **Italy** fell in March for the third time in four months.

Britain's current-account deficit widened to £3.1 billion ($4.8 billion) in the fourth quarter of 2002, up from a revised £1.1 billion in the third quarter. But the deficit for the year, $15.5 billion, was the smallest since 1999. British GDP growth for 2002, meanwhile, was raised to 1.8%, up from previous estimate of 1.6%.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Output, demand and jobs

Mar 27th 2003
From The Economist print edition

% change on year ago

	GDP latest		GDP qtr*	The Economist poll GDP forecasts 2003	2004	Industrial production latest		Retail sales (volume) latest		Unemployment % rate latest		Unemployment % rate year ago
Australia	+ 3.0	Q4	+ 1.6	+ 3.1	+ 3.4	+ 1.6	Q3	+ 5.4	Q4	6.0	Feb	6.6
Austria	+ 1.2	Q3	+ 0.3	+ 1.2	+ 2.0	– 1.5	Dec	+ 0.9	Dec	4.1	Jan	3.9
Belgium	+ 1.6	Q4	+ 0.8	+ 1.3	+ 2.3	+ 3.3	Jan	– 4.9	Dec	11.8	Feb†	10.8
Britain	+ 2.2	Q4	+ 1.7	+ 2.2	+ 2.7	– 0.7	Jan	+ 3.2	Feb	5.0	Jan††	5.1
Canada	+ 3.9	Q4	+ 1.6	+ 3.0	+ 3.3	+ 5.6	Dec	+ 1.4	Dec	7.4	Feb	7.9
Denmark	+ 0.9	Q4	– 0.1	+ 1.8	+ 2.4	– 1.7	Dec	+ 2.4	Dec	5.7	Feb	5.0
France	+ 1.7	Q4	+ 0.9	+ 1.4	+ 2.4	+ 1.0	Jan	– 1.9	Dec	9.1	Jan	8.8
Germany	+ 0.5	Q4	– 0.1	+ 0.5	+ 1.9	– 0.2	Jan	+ 1.3	Jan	10.5	Feb§	9.6
Italy	+ 1.0	Q4	+ 1.7	+ 1.2	+ 2.2	– 1.5	Jan	+ 1.9	Nov‡	8.9	Oct	9.3
Japan	+ 2.8	Q4	+ 2.2	+ 0.5	+ 0.6	+ 7.4	Jan	– 2.4	Jan	5.5	Jan	5.3
Netherlands	+ 0.3	Q4	+ 0.4	+ 0.8	+ 2.2	– 2.3	Jan	– 2.5	Dec	4.6	Feb†**	3.7
Spain	+ 2.1	Q4	+ 1.4	+ 2.2	+ 2.9	+ 2.5	Dec	+ 4.8	Nov‡	12.1	Jan	10.9
Sweden	+ 1.3	Q4	+ 1.2	+ 1.9	+ 2.5	+ 3.7	Jan	+ 4.3	Jan	4.5	Feb†	4.0
Switzerland	+ 0.8	Q4	+ 1.4	+ 0.9	+ 1.9	– 3.5	Q3	– 2.8	Dec	3.9	Feb†	2.6
United States	+ 2.9	Q4	+ 1.4	+ 2.5	+ 3.5	+ 1.8	Feb	+ 4.3	Jan	5.8	Feb	5.6
Euro area	+ 1.3	Q4	+ 0.7	+ 1.1	+ 2.2	+ 0.7	Jan	– 1.9	Dec	8.6	Jan	8.1
MORE COUNTRIES	Data for the countries below are not provided in printed editions of *The Economist*											
Finland	+ 2.8	Q4	+ 2.8	na	na	+ 0.3	Jan	+ 2.0	Nov	9.0	Feb†	9.4
Greece	+ 3.5	Q4	na	na	na	– 0.3	Jan	na		na		na
Iceland	+ 3.6	2001	na	na	na	+12.2	2001	na		4.1	Feb†	2.6
Ireland	+ 6.9	Q3	na	na	na	+ 5.4	Jan	+ 4.7	Jan	4.5	Feb†	4.3
Luxembourg	+ 1.0	2001	na	na	na	+ 3.6	Dec	– 6.1	Oct	3.8	Feb†	2.9
New Zealand	+ 5.0	Q3	+ 5.0	na	na	+ 5.1	Q3	+ 7.3	Q4	4.9	Q4	5.4
Norway	– 0.1	Q4	+ 0.9	na	na	– 4.6	Jan	+ 2.7	Jan	3.7	Q4	3.3
Portugal	– 0.5	Q3	na	na	na	+ 0.8	Jan	+ 3.2	Jan	6.2	Q4†	4.2

*% change at an annual rate. †Not seasonally adjusted. ‡New series. ††Nov-Jan; claimant count rate 3.1% in Feb. §EU harmonised rate 8.7% in Feb. **Nov-Jan, new series

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Prices and wages

Mar 27th 2003
From The Economist print edition

% change on year ago

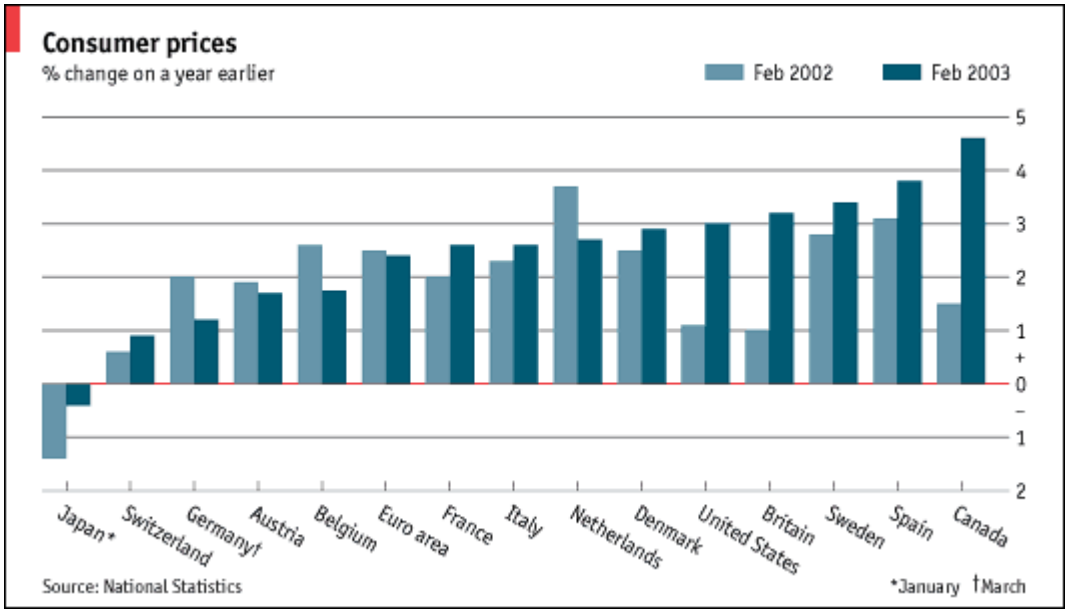
	Consumer prices latest		Consumer prices year ago	The Economist poll consumer prices forecast 2003	2004	Producer prices latest		Producer prices year ago	Wages/earnings latest		Wages/earnings year ago
Australia	+ 3.0	Q4	+ 3.1	+ 2.7	+ 2.9	+ 1.6	Q4	– 0.7	+ 3.9	Q4	+ 4.9
Austria	+ 1.7	Feb	+ 1.9	+ 1.7	+ 1.5	+ 2.1	Feb	– 0.6	+ 2.2	Jan	+ 2.5
Belgium	+ 1.7	Feb	+ 2.6	+ 1.3	+ 1.5	+ 0.3	Feb	– 0.6	+ 2.2	Q4	+ 3.1
Britain	+ 3.2	Feb	+ 1.0	+ 2.6	+ 2.5	+ 1.6	Feb	– 0.2	+ 3.6	Jan	+ 3.0
Canada	+ 4.6	Feb	+ 1.5	+ 2.8	+ 2.3	+ 2.0	Jan	– 1.1	+ 1.8	Dec	+ 3.7
Denmark	+ 2.9	Feb	+ 2.5	+ 2.1	+ 1.9	+ 1.7	Feb	nil	+ 3.9	Q4	+ 4.1
France	+ 2.6	Feb	+ 2.0	+ 1.5	+ 1.4	+ 2.1	Jan	– 1.1	+ 3.5	Q4	+ 3.9
Germany	+ 1.2	Mar	+ 2.0	+ 1.0	+ 1.1	+ 1.6	Feb	– 0.5	+ 2.6	Jan	+ 2.3
Italy	+ 2.6	Feb	+ 2.3	+ 2.3	+ 2.0	+ 2.5	Jan	– 1.2	+ 2.1	Dec	+ 2.8
Japan	– 0.4	Jan	– 1.4	– 0.6	– 0.5	– 0.9	Feb	– 2.6	+ 0.5	Jan	– 2.7
Netherlands	+ 2.7	Feb*	+ 3.7	+ 2.5	+ 2.2	+ 4.3	Jan	– 1.9	+ 3.0	Jan	+ 4.3
Spain	+ 3.8	Feb	+ 3.1	+ 3.0	+ 2.7	+ 2.6	Jan	+ 0.1	+ 3.8	Q3	+ 3.6
Sweden	+ 3.4	Feb	+ 2.8	+ 2.2	+ 2.1	– 0.2	Jan	– 0.5	+ 4.0	Dec	+ 3.2
Switzerland	+ 0.9	Feb	+ 0.6	+ 0.7	+ 1.0	nil	Feb	– 1.5	+ 2.5	2001	+ 1.3
United States	+ 3.0	Feb	+ 1.1	+ 2.2	+ 1.9	+ 3.5	Feb	– 2.6	+ 3.2	Feb	+ 3.5
Euro area	+ 2.4	Feb	+ 2.5	+ 1.7	+ 1.6	+ 2.0	Jan	– 0.8	+ 3.4	Q4	+ 3.2
MORE COUNTRIES	Data for the countries below are not provided in printed editions of *The Economist*										
Finland	+ 1.9	Feb	+ 1.8	na	na	+ 2.3	Feb	– 1.4	+ 3.3	Q4	+ 4.5
Greece	+ 4.3	Feb	+ 3.4	na	na	+ 0.5	Jan	+ 5.2	na		na
Iceland	+ 2.2	Mar	+ 8.7	na	na	+ 3.5	Mar	+ 9.6	+ 5.6	Feb	+ 9.8
Ireland	+ 5.1	Feb	+ 4.7	na	na	– 0.6	Dec	+ 0.2	+ 6.2	Q3	+ 8.1
Luxembourg	+ 2.5	Feb	+ 2.3	na	na	+ 1.2	Dec	– 2.0	+ 0.5	Dec	nil
New Zealand	+ 2.7	Q4	+ 1.8	na	na	– 0.9	Q4	+ 1.8	+ 2.1	Q4	+ 2.2
Norway	+ 4.8	Feb	+ 0.8	na	na	+11.9	Feb	–11.5	+ 5.2	Q4	+ 4.4
Portugal	+ 4.2	Feb	+ 3.2	na	na	+ 2.7	Feb	– 0.6	+ 0.4	Jan*	+ 1.3

*Revised series.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Consumer prices

Mar 27th 2003
From The Economist print edition



Headline inflation has risen sharply in many countries over the past year. Deflation in Japan has also abated. Since rising oil prices are mainly responsible, the upsurge in inflation is likely to be temporary: core inflation has fallen in the United States, for example. Sluggish demand and the appreciation of the euro have also helped to dampen inflation in the euro area, especially in Germany.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Money and interest rates

Mar 27th 2003
From The Economist print edition

	Money supply* % change on year ago			Interest rates % p.a. (Mar 26th 2003)					
				3-mth money market		2-year	10-year gov't bonds		corporate
	narrow	broad		latest	year ago	gov't bonds	latest	year ago	bonds
Australia	– 9.7	+10.4	Jan	4.79	4.65	4.57	5.45	6.41	6.52
Britain	+ 6.2	+ 6.7	Feb	3.63	4.16	3.59	4.45	5.30	6.06
Canada	+ 5.7	+ 3.7	Feb	3.15	2.25	3.84	5.20	5.80	7.09
Denmark	+ 8.7	+10.4	Feb	2.68	3.63	2.83	4.41	5.38	5.46§
Japan	+21.3	+ 2.0	Feb	0.02	0.05	0.04	0.71	1.44	0.83
Sweden	– 0.1	+ 4.3	Dec	3.39	4.11	3.67	4.69	5.59	4.18
Switzerland	+12.9	+ 8.7	Feb	0.32	1.70	0.62	2.54	3.59	3.41
United States	+ 3.8	+ 6.3	Feb	1.18	1.91	1.62	3.94	5.34	6.13
Euro area†	+ 9.8	+ 7.4	Jan	2.53	3.45	3.14	4.15	5.16	4.63

*Narrow: M1 except Britain and Sweden M0, broad: M2 or M3 except Britain M4. †Germany for bonds. §New series. Benchmarks: US 30-year 4.93%, Japan No.247 0.72%. Central bank rates: US fed funds 1.25%, ECB refinancing 2.50%, BOJ overnight call 0.001%, BOE repo 3.75%. Sources: Commerzbank, Danske Bank, J.P. Morgan Chase, Royal Bank of Canada, Stockholmsbörsen, UBS Warburg, Global Insight, Westpac, Thomson Datastream. Rates cannot be construed as banks' offers.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

The Economist commodity price index

Mar 27th 2003
From The Economist print edition

1995=100

	Mar 18th	Mar 25th*	% change on one month	% change on one year
Dollar index				
All items	76.6	75.8	– 3.3	+ 8.2
Food	77.4	76.4	– 3.6	+ 8.2
Industrials				
All	75.4	74.9	– 2.7	+ 8.1
Nfa†	79.1	78.3	– 2.1	+12.7
Metals	72.3	72.1	– 3.3	+ 4.1
Sterling index				
All items	77.2	76.1	– 3.2	– 1.8
Euro index				
All items	94.7	93.2	– 2.7	–11.3
Yen index				
All items	96.8	96.7	– 1.2	– 2.4
Gold				
$ per oz	339.25	329.80	– 6.4	+11.1
West Texas Intermediate				
$ per barrel	31.47	27.95	–22.4	+ 8.6

* Provisional. † Non-food agriculturals.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Stockmarkets

Mar 27th 2003
From The Economist print edition

Market indices

	Mar 26th	2003 high	2003 low	% change on one week	% change on record high	% change on Dec 31st 2002 in local currency	% change on Dec 31st 2002 in $ terms
Australia (All Ordinaries)	2,858.4	3,049.6	2,673.3	+ 1.6	-16.9	- 3.9	+ 2.0
Austria (ATX)	1,171.0	1,187.8	1,120.2	+ 2.8	-32.6	+ 1.8	+ 3.6
Belgium (Bel 20)	1,719.4	2,074.1	1,426.6	+ 0.8	-53.3	-15.1	-13.6
Britain (FTSE 100)	3,793.1	4,009.5	3,287.0	+ 0.7	-45.3	- 3.7	- 5.9
Canada (Toronto Composite)	6,357.0	6,837.3	6,228.6	- 1.5	-44.2	- 3.9	+ 3.1
Denmark (KBX)	161.6	173.2	145.0	+ 1.1	-46.4	- 2.8	- 1.1
France (SBF 250)	1,865.8	2,144.8	1,630.1	- 1.6	-57.5	- 9.1	- 7.5
(CAC 40)	2,787.6	3,210.3	2,403.0	- 1.8	-59.7	- 9.0	- 7.4
Germany (DAX)	2,579.3	3,157.3	2,203.0	- 1.4	-68.0	-10.8	- 9.3
Italy (BCI)	1,047.6	1,142.4	959.4	+ 0.8	-52.0	- 4.1	- 2.4
Japan (Nikkei 225)	8,351.9	8,790.9	7,862.4	+ 3.7	-78.5	- 2.6	- 3.8
(Topix)	821.4	865.4	760.1	+ 4.1	-71.5	- 2.6	- 3.7
Netherlands (AEX)	266.6	337.3	218.4	- 0.5	-62.0	-17.4	-16.0
Spain (Madrid SE)	639.8	683.8	576.8	- 0.6	-44.2	+ 0.9	+ 2.7
Sweden (Affarsvarlden Gen)	141.5	153.4	127.8	- 0.8	-64.6	- 2.5	- 1.7
Switzerland (Swiss Market)	4,247.1	4,965.3	3,675.4	- 0.3	-49.5	- 8.3	- 8.3
United States (DJIA)	8,229.9	8,842.6	7,524.1	- 0.4	-29.8	- 1.3	- 1.3
(S&P 500)	870.0	931.7	800.7	- 0.5	-43.0	- 1.1	- 1.1
(NASDAQ Comp)	1,387.5	2,359.5	1,271.5	- 0.7	-72.5	+ 3.9	+ 3.9
Europe (FTSE Eurotop 300)*	788.4	890.8	682.7	- 0.4	-53.8	- 8.0	- 6.4
Euro area (FTSE Ebloc 100)*	655.8	757.2	565.7	- 0.8	-57.7	- 8.7	- 7.1
World (MSCI)†	770.1	830.7	710.8	+ 0.2	-46.8	na	- 2.8
World bond market (Salomon)‡	531.2	551.7	518.6	+ 0.3	- 3.7	na	+ 1.1

*In euro terms. †Morgan Stanley Capital International index includes individual markets listed above plus eight others, in dollar terms.
‡Salomon Smith Barney World Government Bond Index, total return, in $ terms.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

PRINTABLE PAGE VIEW SPONSORED BY

About sponsorship

Trade, exchange rates and budgets

Mar 27th 2003
From The Economist print edition

	Trade balance*, $bn latest 12 months	Current account $bn latest 12 mths	Current account The Economist poll % of GDP, forecast 2003	Current account The Economist poll % of GDP, forecast 2004	Exchange rate trade-weighted† 1990=100 Mar 26th	Exchange rate trade-weighted† 1990=100 year ago	Currency units per $ Mar 26th	Currency units per $ year ago	Currency units per £	Currency units per euro	Currency units per ¥100	Budget balance % of GDP 2002‡
Australia	− 6.0 Jan	− 17.7 Q4	− 4.3	− 3.8	77.2	75.7	1.67	1.90	2.63	1.79	1.39	0.1
Austria	+ 0.4 Dec	+ 0.9 Jan	− 0.7	− 1.4	101.7§	100.3	0.94	1.14	1.47	–	0.78	-1.6
Belgium	+ 16.4 Jan	+ 12.8 Sep	+ 4.9	+ 5.0	101.4§	99.0	0.94	1.14	1.47	–	0.78	nil
Britain	− 53.6 Jan	− 15.5 Q4	− 1.9	− 1.8	101.0	106.9	0.64	0.70	–	0.68	0.53	-1.4
Canada	+ 34.7 Jan	+ 11.0 Q4	+ 1.9	+ 2.0	80.1	76.0	1.47	1.59	2.32	1.57	1.23	0.6
Denmark	+ 8.1 Jan	+ 5.1 Jan	+ 2.0	+ 1.7	105.2	101.7	6.96	8.48	10.9	7.43	5.79	2.2
France	+ 9.0 Jan	+ 27.3 Jan	+ 1.7	+ 1.5	104.5§	101.6	0.94	1.14	1.47	–	0.78	-2.7
Germany	+120.0 Jan	+ 48.3 Jan	+ 1.7	+ 1.5	101.8§	98.5	0.94	1.14	1.47	–	0.78	-3.7
Italy	+ 8.2 Jan	− 8.8 Jan	− 0.2	− 0.1	74.5§	72.5	0.94	1.14	1.47	–	0.78	-2.3
Japan	+ 93.6 Jan	+113.4 Jan	+ 2.7	+ 2.9	130.4	127.8	120	133	189	128	–	-7.9
Netherlands	+ 29.1 Jan	+ 9.1 Q4	+ 3.1	+ 3.2	100.7§	97.9	0.94	1.14	1.47	–	0.78	-0.8
Spain	− 40.0 Dec	− 17.1 Dec	− 2.0	− 2.0	76.0§	74.2	0.94	1.14	1.47	–	0.78	nil
Sweden	+ 15.0 Feb	+ 9.9 Dec	+ 3.3	+ 3.3	78.7	77.3	8.64	10.3	13.6	9.23	7.20	1.7
Switzerland	+ 4.7 Feb	+ 29.8 Q3	+10.8	+11.6	115.7	112.7	1.38	1.67	2.18	1.48	1.15	na
United States	−495.8 Jan	−503.4 Q4	− 5.1	− 4.0	108.5	123.3	–	–	1.57	1.07	0.83	-3.1
Euro area	+ 95.5 Jan	+ 53.5 Jan	+ 0.9	+ 0.8	86.5	78.2	0.94	1.14	1.47	–	0.78	-2.2
MORE COUNTRIES	Data for the countries below are not provided in printed editions of *The Economist*											
Finland	+ 13.5 Jan	+ 10.5 Jan	na	na	80.4§	78.2	0.94	1.14	1.48	–	0.78	3.2
Greece	− 22.0 Jan	− 10.1 Jan	na	na	58.7§	57.5	0.94	1.14	1.48	–	0.78	-1.1
Iceland	+ 0.1 Jan	nil Q4	na	na	93.0**	80.4	78.9	100.0	124	84.3	65.7	0.3
Ireland	+ 36.0 Dec	+ 0.1 Q3	na	na	91.6§	87.2	0.94	1.14	1.48	–	0.78	-0.5
Luxembourg	− 3.1 Dec	+ 2.1 Q3	na	na	101.4§	99.0	0.94	1.14	1.48	–	0.78	1.8
New Zealand	− 0.9 Feb	− 1.9 Q4	na	na	96.6	85.1	1.83	2.30	2.87	1.95	1.52	1.6
Norway	+ 28.0 Feb	+ 27.4 Jan	na	na	101.1	98.7	7.35	8.84	11.6	7.85	6.12	12.4
Portugal	− 12.8 Dec	− 9.9 Dec	na	na	91.3**	89.9	0.94	1.14	1.48	–	0.78	-3.4

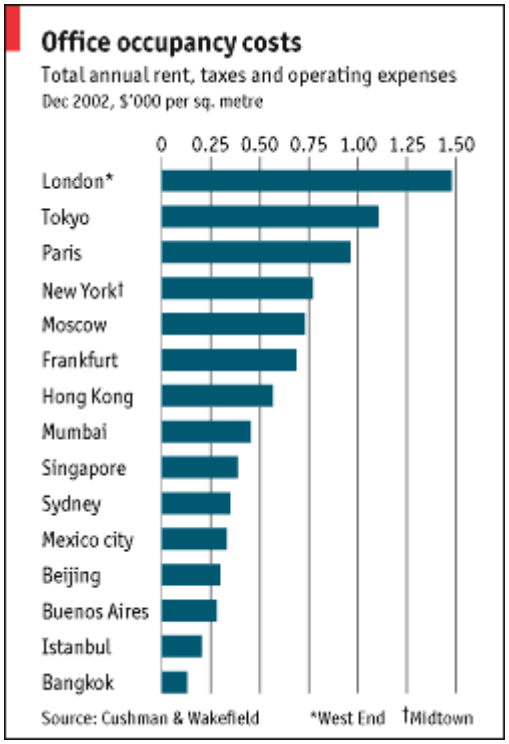
*Merchandise. Australia, Britain, France, Canada, Japan and United States imports fob, exports fob. All others cif/fob. †Bank of England except §IMF, January average. ‡OECD estimate. **IMF, November average.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

About sponsorship

Office occupancy costs

Mar 27th 2003
From The Economist print edition



Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Overview

Mar 27th 2003
From The Economist print edition

In February **Mexico** recorded its first monthly trade surplus since mid-1997, thanks to high oil prices and increasing exports. In the year to February, the trade deficit shrank to $6.9 billion.

Argentina's economy shrank by 3.6% in the year to the fourth quarter, although it grew by 0.8% compared with the third quarter. Industrial production rose by 12.3% in the 12 months to February, and the currency is also strengthening. The Argentine **peso** reached 2.96 per dollar on March 25th, its highest level for more than eleven months.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Tuberculosis

Mar 27th 2003
From The Economist print edition

Almost 8.5m people developed tuberculosisin 2001, according to the World Health Organisation (WHO) in its *Global Tuberculosis Report* for 2003. New infections are rising rapidly in sub-Saharan Africa and Russia, boosted by HIV and poverty. Globally, however, the growth of new infections has slowed to 0.4% a year. More than 60% of the world's population now has access to standard diagnosis and treatment. But the WHO gives warning that more money and effort will be needed to reach the target of detecting 70% of all TB cases, and curing 85% of those identified, by 2005.

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Economy

Mar 27th 2003
From The Economist print edition

	% change on year ago						Latest 12 months, $bn				Foreign reserves* $bn, latest	
	GDP		Industrial production		Consumer prices		Trade balance		Current account			
China	+ 8.1	Q4	+19.8	Feb	+ 0.2	Feb	+23.9	Feb	+17.4	2001	269.9	Oct
Hong Kong	+ 5.0	Q4	– 9.2	Q4	– 2.0	Feb	– 7.9	Feb	+16.5	Q3	113.7	Feb
India	+ 5.8	Q3	+ 6.4	Jan	+ 3.4	Jan	– 7.9	Jan	+ 4.5	Q3	69.2	Feb
Indonesia	+ 3.8	Q4	+ 7.1	Dec‡	+ 7.3	Feb	+25.7	Jan	+ 7.5	Q3	31.1	Jan
Malaysia	+ 5.6	Q4	+ 1.0	Jan	+ 1.6	Feb	+13.9	Jan	+ 6.6	Q3	34.5	Feb
Philippines	+ 5.8	Q4	+ 4.9	Jan	+ 3.1	Feb	+ 0.7	Jan	+ 6.1	Sep	13.1	Feb
Singapore	+ 2.7	Q1	+13.5	Jan	+ 0.4	Feb	+10.7	Feb	+18.7	Q4	83.6	Feb
South Korea	+ 6.8	Q4	+ 3.6	Jan	+ 3.9	Feb	+ 9.3	Feb	+ 5.1	Feb	123.9	Feb
Taiwan	+ 4.2	Q4	+10.1	Feb	– 1.5	Feb	+16.2	Feb	+25.8	Q4	166.3	Feb
Thailand	+ 6.1	Q4	+13.0	Jan	+ 1.9	Feb	+ 4.6	Jan	+ 8.0	Jan	38.9	Jan
Argentina	– 3.6	Q4	+12.3	Feb	+36.1	Feb	+15.9	Jan	+ 7.0	Q3	9.5	Jan
Brazil	+ 3.4	Q4	+ 2.8	Jan	+15.9	Feb	+15.0	Feb	– 5.5	Feb	38.6	Jan
Chile	+ 3.2	Q4	+ 2.8	Jan	+ 3.8	Feb	+ 2.3	feb	– 0.6	Q4	16.5	Feb
Colombia	+ 2.0	Q4	+ 5.6	Dec	+ 7.2	Feb	nil	Dec	– 1.5	Q3	10.9	Feb
Mexico	+ 1.9	Q4	+ 0.3	Jan	+ 5.5	Feb	– 6.9	Feb	–14.5	Q4	51.5	Jan
Peru	+ 4.6	Jan	+ 4.0	Jan	+ 2.8	Feb	+ 0.3	Jan	– 1.1	Q4	9.3	Jan
Venezuela	–16.7	Q4	–64.8	Dec	+38.7	Feb	+13.9	Q4	+ 7.6	Q4	8.6	Dec
Egypt	+ 3.1	2002†	+ 4.2	2002†	+ 3.0	Dec	– 7.8	Dec	+ 0.1	Q3	13.2	Dec
Israel	+ 1.3	Q4	+ 1.3	Dec	+ 5.1	Feb	– 5.5	Feb	– 2.1	Q4	23.4	Feb
South Africa	+ 3.0	Q4	+ 1.5	Jan	+12.5	Feb	+ 3.9	Jan	+ 0.3	Q4	5.6	Jan
Turkey	+ 7.9	Q3	+13.2	Jan	+27.0	Feb	–15.7	Dec	– 1.3	Dec	29.2	Jan
Czech Republic	+ 1.5	Q4	+ 6.4	Jan	– 0.4	Feb	– 2.5	Feb	– 3.5	Q4	24.4	Feb
Hungary	+ 3.7	Q4	+ 4.7	Jan	+ 4.5	Feb	– 3.3	Jan	– 2.7	Jan	13.0	Feb
Poland	+ 2.1	Q4	+ 4.1	Feb	+ 0.5	Feb	–10.3	Jan	– 6.5	Jan	30.7	Feb
Russia	+ 4.3	Q3	+ 6.5	Feb	+14.8	Feb	+48.2	Jan	+30.3	Q3	49.3	Feb
MORE COUNTRIES	Data for the countries below are not provided in printed editions of *The Economist*											
Pakistan	+ 3.6	2002†	+15.8	Nov	+ 3.5	Feb	– 1.4	Feb	+ 2.7	2002†	8.5	Jan
Saudi Arabia	+ 1.2	2001	na		– 0.7	Nov	+39.2	2001	+ 9.4	2001	21.2	Jan

*Excluding gold, except Singapore; IMF definition. †Year ending June. ‡New series.

Sources: National statistics offices, central banks and stock exchanges; Thomson Datastream; Economist Intelligence Unit; Reuters; J.P. Morgan Chase; Hong Kong Monetary Authority; Centre for Monitoring Indian Economy; FIEL; EFG-Hermes; Bank Leumi Le-Israel; Standard Bank Group; Akbank; Deutsche Bank

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.

Financial markets

Mar 27th 2003
From The Economist print edition

	Currency units			Interest rates	Stockmarkets	% change on		
	per $		per £	short-term	Mar 26th		Dec 31st 2002	
	Mar 26th	year ago	Mar 26th	% p.a.		one week	in local currency	in $ terms
China	8.28	8.28	13.0	na	1,523.0	−0.9	+ 7.3	+ 7.3
Hong Kong	7.80	7.80	12.3	1.37	9,047.1	−1.2	− 2.9	− 2.9
India	47.6	48.7	74.9	5.89	3,143.6	+0.7	− 6.9	− 6.2
Indonesia	8,915	9,892	14,030	12.12	401.0	+4.0	− 5.6	− 5.3
Malaysia	3.80	3.80	5.98	3.10	633.0	+0.8	− 2.1	− 2.1
Philippines	53.7	51.1	84.5	8.44	1,027.9	+0.7	+ 0.9	+ 0.4
Singapore	1.77	1.83	2.78	0.69	1,325.0	+3.1	− 1.2	− 3.1
South Korea	1,244	1,321	1,958	4.76	554.8	+2.4	− 11.6	− 15.7
Taiwan	34.7	35.0	54.7	1.40	4,496.1	−0.4	+ 1.0	+ 1.1
Thailand	42.9	43.4	67.5	1.75	368.1	+1.9	+ 3.3	+ 3.8
Argentina	2.90	2.30	4.56	8.40	568.4	+0.7	+ 8.3	+ 25.9
Brazil	3.39	2.34	5.33	23.65	11,206.3	+1.8	− 0.5	+ 3.9
Chile	726	658	1,143	2.64	5,033.4	−0.5	+ 0.3	− 0.6
Colombia	2,960	2,282	4,657	7.75	1,606.9	−0.6	− 0.1	− 3.2
Mexico	10.75	9.07	16.9	8.43	5,952.4	−1.1	− 2.9	− 5.4
Peru	3.48	3.46	5.47	3.87	1,555.6	+1.2	+ 11.8	+ 12.9
Venezuela	1,598	891	2,515	28.59	8,429.1	−0.4	+ 5.2	− 8.7
Egypt	5.76	4.63	9.06	11.03	6,053.0	+7.2	+ 12.7	− 9.4
Israel	4.69	4.62	7.38	6.03	351.7	+1.0	+ 5.8	+ 7.1
South Africa	7.9	11.7	12.5	13.30	7,838.3	−5.5	− 15.5	− 8.7
Turkey	1,715,000	1,351,500	2,698,896	42.00	9,408.5	−5.3	− 9.3	− 12.2
Czech Republic	29.8	35.4	46.9	2.43	490.2	+2.7	+ 6.4	+ 7.4
Hungary	231	276	363	6.55	7,570.2	+2.3	− 2.9	− 5.4
Poland	4.07	4.10	6.40	6.14	14,041.9	+1.6	− 2.3	− 7.9
Russia	31.4	31.2	49.4	18.00	364.6	+0.4	− 0.3	+ 1.5
EMF (MSCI)*	1.00	1.00	1.57	na	278.7	+0.7	na	− 4.6
EMBI+†	1.00	1.00	1.57	na	244.3	+0.9	na	+ 6.7

*Emerging Mkts Free. †J.P. Morgan Chase's Emerging Mkts Bond Index Plus. ‡ In $ terms.

Sources: National statistics offices, central banks and stock exchanges; Thomson Datastream; Economist Intelligence Unit; Reuters; J.P. Morgan Chase; Hong Kong Monetary Authority; Centre for Monitoring Indian Economy; FIEL; EFG-Hermes; Bank Leumi Le-Israel; Standard Bank Group; Akbank; Deutsche Bank

Copyright © 2006 The Economist Newspaper and The Economist Group. All rights reserved.